

# SELF-STUDY REPORT

(NAAC Accreditation - 2016)

## Part II

### EVALUATIVE REPORTS OF THE DEPARTMENTS

Submitted to  
National Assessment & Accreditation Council  
(NAAC)  
BENGALURU



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# EVALUATIVE REPORTS OF THE DEPARTMENTS



**MAHARSHI DAYANAND SARASWATI  
UNIVERSITY  
AJMER**

**FACULTY OF ARTS  
HINDI  
SANSKRIT**



**MAHARSHI DAYANAND SARASWATI  
UNIVERSITY**

**AJMER**

हिंदी  
विभाग  
DEPARTMENT  
OF  
HINDI

1. Name of the Department : HINDI
2. Year of establishment : 2015
3. Is the Department part of a School/Faculty of the university? : YES
4. Names of programmes offered (PG, Ph.D. etc.) : M.A. (Hindi)
5. Interdisciplinary programmes and departments involved : NA
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : NIL
7. Details of programmes discontinued, if any, with reasons : NIL
8. Examination System: Annual/Semester/Choice Based Credit System : Annual
9. Participation of the department in the courses offered by other departments : NIL
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Designation	Sanctioned	Filled	Actual (including CAS & MPS)
Professor		Nil	
Associate Professor		Nil	
Assistant Professor		Nil	
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D.
Dr. N.K. Bhabhra	M.A. Hindi, English, Sanskrit Diploma (Russian) Ph.D. (Hindi)	Retired lecturer on contract assignment	Poetics Modern Poetry Linguistics	37	01

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors : NO
13. Percentage of classes taken by temporary faculty – programme-wise information : 100%
14. Programme-wise Student Teacher Ratio 1:11
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual : 02
16. Research thrust areas as recognized by major funding agencies: N.A.
17. Number of faculty with ongoing projects from a) national b) international funding



31. Code of ethics for research followed by the departments : NIL

32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
<b>M.A. (Hindi)</b>	19	07	04	Awaited	

33. Diversity of students

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
<b>M.A. (Hindi)</b>	65 %	38 %		

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. : New Department

35. Student progression : New Department

36. Diversity of staff

Percentage of faculty who are graduates of the same university	-
from other universities within the State	-
from universities from other States	-
from universities outside the country	-

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : New Department

38. Present details of departmental infrastructural facilities with regard to

- Library : New Department
- Internet facilities for staff and students : Yes
- Total number of class rooms : 02
- Class rooms with ICT facility : NIL
- Students' laboratories : NIL
- Research laboratories : NIL

39. List of doctoral, post-doctoral students and Research Associates : New Department

40. Number of post graduate students getting financial assistance from the university: New Department

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology: New Department

42. Does the department obtain feedback from: New Department

43. List the distinguished alumni of the department (maximum 10) : New Department
44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts: New Department
45. List the teaching methods adopted by the faculty for different programmes: New Department
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?: New Department
47. Highlight the participation of students and faculty in extension activities.
48. Give details of "beyond syllabus scholarly activities" of the department: New Department
49. State whether the programme/ department is accredited/graded by other agencies? If yes, give details: New Department
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied: New Department
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department: New Department
52. Future plans of the department.

Department Plans to start new programmes from next Academic Session 2016-17.

संस्कृत

विभाग

Department

of

Sanskrit

1. Name of the Department : Sanskrit
2. Year of establishment : 2010
3. Is the Department part of a School/Faculty of the university? : YES
4. Names of programmes offered : P.G. M.A. VEDIC VANGMAYA
5. Interdisciplinary programmes and departments involved -
6. Courses in collaboration with other universities, industries, foreign institutions, etc. -
7. Details of programmes discontinued, if any, with reasons -
8. Examination System: Annual
9. Participation of the department in the courses offered by other departments:
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others) Nil
11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance: Nil
12. List of senior Visiting Fellows, adjunct faculty, emeritus professors : NIL
12. Percentage of classes taken by temporary faculty – programme-wise information :100%
13. Programme-wise Student Teacher Ratio
14. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual -
15. Research thrust areas as recognized by major funding agencies -
16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. -
17. Inter-institutional collaborative projects and associated grants received -  
a) National collaboration b) International collaboration
18. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.
19. Research facility / centre with
  - state recognition
  - national recognition
  - international recognition
21. Special research laboratories sponsored by / created by industry or corporate bodies

22. Publications: Nil
23. Details of patents and income generated: Not Applicable
24. Areas of consultancy and income generated: Not Applicable
25. Faculty selected nationally / internationally to visit other laboratories / institutions /industries in India and abroad
26. Faculty serving in  
a) National committees b) International committees c) Editorial Boards d) any other (please specify)
28. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). Not applicable
29. Student projects
- percentage of students who have done in-house projects including inter-departmental projects
  - percentage of students doing projects in collaboration with other universities /industry / institute
30. Awards / recognitions received at the national and international level by
- Faculty
  - Doctoral / post doctoral fellows
  - Students
31. Seminars/ Conferences/Workshops organized and the source of funding (national /international) with details of outstanding participants, if any.
32. Code of ethics for research followed by the departments
33. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female

33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

35. Student progression: Not applicable
36. Diversity of staff: Not applicable
37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period
38. Present details of departmental infrastructural facilities with regard to
  - a) Library :YES
  - b) Internet facilities for staff and students : YES
  - Total number of class rooms : 02
  - d) Class rooms with ICT facility
  - e) Students' laboratories
  - f) Research laboratories
39. List of doctoral, post-doctoral students and Research Associates
  - a) from the host institution/university
  - b) from other institutions/universities
40. Number of post graduate students getting financial assistance from the university.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
42. Does the department obtain feedback from
  - a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10)
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.
45. List the teaching methods adopted by the faculty for different programmes.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
47. Highlight the participation of students and faculty in extension activities.
48. Give details of "beyond syllabus scholarly activities" of the department.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
52. Future plans of the department.

# FACULTY OF COMMERCE

## COMMERCE



**MAHARSHI DAYANAND  
SARASWATI UNIVERSITY**

**AJMER**

**वाणिज्य  
विभाग**

DEPARTMENT  
OF  
COMMERCE

1. Name of the Department : **DEPARTMENT OF COMMERCE**
2. Year of Establishment: **2000**
3. Is the Department part of a School/  
Faculty of the University? **Faculty of Commerce**
4. Names of programmes offered (UG,  
PG, M.Phil, Ph.D., Integrated Masters;  
Integrated Ph.D, D.Sc, D. Lit, etc): **PG, M.Phil, Ph.D**

Level	Name of Courses
<b>Under-Graduate Level</b>	--
<b>Post-Graduate Level</b>	M. Com. (E.A.F.M.), M. Com.(A.B.S.T.) , M. Com.(B.A.)
<b>Research Degrees</b>	M. Phil (Economic Administration & Financial Management)
	M. Phil (Business Administration)
	M. Phil (A.B.S.T.)
	Ph D

5. Interdisciplinary programmes and departments involved : **NIL**
6. Courses in collaboration with other universities, industries,  
foreign institutions etc. : **NIL**
7. Details of programmes discontinued, if any, with reasons : **NIL**
8. Examination System: **Annual**
9. Participation of the department in the courses offered  
by other departments. **NIL**
10. Number of teaching posts sanctioned, filled and actual

Designation	Sanctioned	Filled	Actual (including CAS & MPS)
<b>Professor</b>	01	00	01 (Promoted through CAS)
<b>Associate Professor</b>	01	01	00
<b>Assistant Professor</b>	00	00	00
<b>Others</b>	00	00	00

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance.

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/
<b>Prof. B.P. Saraswat</b>	M.Com , Ph.D	Professor & Head	Economic Administration	31 Years	23

Financial Management
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12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

- **Dr. R. K. Godha**
- **Dr. B.P. Joshi**
- **Dr. A. K. Raina**
- **Dr. Priyanka Patni**

13. Percentage of classes taken by temporary faculty- programme-wise information

14. Programme –wise student Teacher Ratio. 106: 3

15. Number of academic support staff (technical) and administrative staff: sanctioned , filled and actual.

Administrative Staff	Sanctioned	Filled	Actual
LDC	01	01	01
Class IV	01	01	01

16. Research thrust areas as recognized by major funding agencies

Title	Dur.	Agency	Yr.	Remarks
<b>Supported Projects</b>				
01	Evaluating Service Quality	3yr.	University Grants Commission	200 1 Major Research Project. Budget Rs. 3,94,000.

17. Number of faculty with ongoing projects **NIL**

18. Inter-institutional collaborative projects and associated grants received. **NIL**

19. Departmental projects funded by DST-FIST, UGC-SAP/CAS, DPE, DBT, ICSSR, AICTE etc. Total grants received. **NIL**

20. Research facility / centre with **NIL**

- State recognition
- National recognition
- International recognition

21. Special research laboratories sponsored by/ created by industry or corporate bodies. **NIL**

22. Publications:

Number of Papers published in Peer reviewed journals (national/ international)

- **Saraswat, B. P.**, and Shivnani, T. (2010), 'Social Banking Experiment' Cross and Crown Publications, Udaipur, ISSN: 0975-3613, Vol. 1, No. 1 Part 2, pp. 266-281.
- Shivnani, T., and **Saraswat, B. P.** (2010), 'Social Banking Experiment: A study of Bank of Baroda with special reference to Ajmer region', Eastern Business Review, Varanasi, Vol.1, No.1, pp. 53-61.

- Verma, N., Pareek, A., and **Saraswat, B. P.** (2010), 'Branding in Small and Medium Entrepreneurial Ventures' Brand research Edited by Lubna Nafees, Omkumar Krishnan, Tim Gore, MaMillan Advance Research Series, pp. 249-260.
- Chowdhary, N. and **Saraswat, B.P. (2004)**, 'Working with Redisiño', *Pranjana*, Vol.7, No.2, pp.87-92.
- **Saraswat, B.P.** and Agarwal R.S. (2004), 'Working Capital trends of Cement Industry in Nepal', *Indian Journal of Accounting*, Vol. 35, No. (1), Dec, pp. 26-35.
- Chowdhary, N. and **Saraswat, B.P.** (2003), 'Service leadership study', *Journal of Services Research*, Vol. 3, No. 2, pp.105-123.
- Agarwal, R.S. and **Saraswat B.P.** (2002) 'Capital recovery ability in selected road transport undertakings', *Indian Journal of accounting*, Vol. XXXII, June, pp. 46-49.
- Chowdhary, N. and **Saraswat, B.P.** (2001) ' Redisiño: The Enterprise Model', *University News*, Vol. XXXIX, No.33, pp.
- Agarwal, R.S. and **Saraswat, B.P.** (2001) 'Economic Value Added', *Journal of Commerce and Information Technology*, Vol.1, No. 2, July-Dec.,pp. 35-39.
- Chowdhary, N. and **Saraswat, B.P.** (2001) 'Inside smaller hospitals: Managing service operations'. In Proceedings of the *Twelfth Annual Conference of the Production and Operations Management Society, POM-2001*, March 30- April 2, 2001, Orlando, Florida. Available at <URL:<http://www.opentextproject.org/content/content.cfm?discID=5&courseID=41>>
- **Saraswat B.P.** and Chowdhary, N. (2000) 'Total Quality in Higher Education: Special Reference to Professional Education', in Joshi.K.M. (eds.) *Higher education: Developmental issues*, New Delhi, Commonwealth, pp.
- Chowdhary, N. and **Saraswat, B.P.** (2000) 'Comparative study of healthcare models', *Hospital Administration*, Vol. XXXVII, No. 1&2, pp.
- Chowdhary, N. and **Saraswat, B.P.** (2000), 'Look! What ISO is doing to your service quality', *Udyog Pragati*, Vol. 25, No.1, pp.
- **Saraswat, B.P.** and Chowdhary, N. (2000) ' Strategize for Service Sector Growth', *Indian Management*, Vol. 39, No. 6, pp.
- **Saraswat, B.P.** and Chowdhary, N. (2000) 'Learning to learn: Knowledge management', *Indian Management*, Vol. 39, No. 4, pp.

Monographs

NIL

### Chapters in Books

- **Saraswat, B. P.**, Sharma, M. L. and Singh, G. (2006). Banking and Financial System, *Ramesh Book Depot*, Jaipur
- **Saraswat, B. P.** and Godha R.K. (2006) Financial Market Operations, *Ramesh Book Depot*, Jaipur
- **Saraswat, B.P.**, Agarwal, D.P., Sharma, M.C. and Raghav, K. (2006) Economic and Financial Studies for Class XII, *Board of Secondary Education Rajasthan*, Ajmer.
- Agarwal, N.P., **Saraswat, B.P.** and Mishra, B.K. (2006) Project Planning and Budgetary Control, *Ramesh Book Depot*, Jaipur.
- **Saraswat, B.P.**, Lodha, R.C., (2005) Business Economics, *Ajmera Book Company*, Jaipur
- Agarwal, M.D., Agarwal, N.P., **Saraswat, B.P.** and Bhatnagar, J.S. (2005) Financial Management, *Ramesh Book Depot*, Jaipur
- **Saraswat, B.P.**, Sharma, M.K. and Dave, V.D (2005). Business Studies and Banking, *Alka Publications*, Ajmer.

- National Institute of Open Schooling (**Member, Subject team**). (2004) Business Studies-1, *National Institute of Open Schooling*, New Delhi.
  - Agarwal, N.P., Sharma, M.L. and **Saraswat B.P.** (2004) Business Budgeting, *Ajmera Book Company*, Jaipur.
  - Agarwal, D.P., Badana, N.K, Mehra, R.L. and **Saraswat, B.P.** (1998) Elementary Economics (Hindi), *Ajmera Book Company*, Jaipur.
- Books with ISBN with details of Publishers
- Chowdhary, Nimit and **Saraswat, Bhagwati, P.** (2005), Organisational Culture and Human Talent: The Service Industry, New Delhi: *Macmillan India Limited*. ISBN 1403 92858 4.

23. Details of patents and income generated. **NIL**
24. Areas of consultancy and income generated **NIL**
25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad. **NIL**
26. Faculty serving in
- a) National committees
  - b) International committees
  - c) Editorial Board
    - Journals**
    - **Chief Editor**, Entrepreneurship Business Review, A bi-annual refereed journal of Center for ESBM, MDS University, Ajmer
    - **Associate Editor**, Indian Journal of Accounting
    - **Editor**, SAJTH (South Asian Journal of Tourism & Heritage)
  - d) Any other.
    - Memberships**
    - Life Member, International Youth Hostel Federation
    - Life Member, Indian Commerce Association
    - Convener for Selection committee of Chairman, Board of Secondary Education Rajasthan.
    - Member for Selection Committee of Vice- Chancellor, Rajasthan.
    - Member, Board of Management at Various Universities in Rajasthan.
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs workshops, training programs, and similar programs). **NIL**
28. Students projects **NIL**
29. Awards / recognitions received at the national and international level by **NIL**
- Faculty
  - Doctoral / Post doctoral fellows
  - Students
30. Seminars / Conference / Workshops organized and the source of funding (national / international) with details of outstanding participants if any. **NIL**

31. Code of ethics for research followed by the departments

**NIL**

32. Students profile programme- wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Com (P) EAFM	50	31	19	N.A.	N.A.
M.Com (F) EAFM	32	10	22	N.A.	N.A.
M.Com (P) Bus. Adm.	30	22	08	N.A.	N.A.
M.Com (F) Bus. Adm.	23	13	10	N.A.	N.A.
M.Com (P) ABST	19	07	12	N.A.	N.A.
M.Com (F) ABST	15	06	09	N.A.	N.A.

33. Diversity of students

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Com (P) EAFM	99 %	1 %		
M.Com (P) Bus. Adm.	99 %	1 %		
M.Com (P) ABST	99 %	1 %		

34. How many students have cleared Civil Services and Defense Services examinations NET, SET, GATE and other competitive examinations? Give details category-wise

35. Students progression

Student Progression	Percentage against enrolled
UG to PG	
PG TO M.Phil	
P.G. to Ph.D	
Ph.D to Post- Doctoral	
Employed	
Campus selection	
Other than campus recruitment	
Entrepreneurs	

36. Diversity of staff

Percentage of faculty who are graduates
Of the same university
From other universities within the State
From universities from other States
From universities outside the country

37. Number of faculty who were awarded M.Phil, Ph.D, D. Sc and D. Lit. during the assessment period. **NIL**

38. Present details of departmental infrastructural facilities with regard to

- |   |                            |
|---|----------------------------|
| a. Library                                    | Book Bank having 100 Books |
| b. Internet facilities for staff and students | Not Available              |
| c. Total number of class rooms.               | 03 Class room              |
| d. Class rooms with ICT facility              | <b>NIL</b>                 |
| e. Students laboratories                      | <b>NIL</b>                 |
| f. Research laboratories                      | <b>NIL</b>                 |

39. List of doctoral, post doctoral students and Research Associates

a. From the host institution/ university

Thesis	Faculty/ University	Candidate	Remarks
1. Organizational Effectiveness Through Quality Circle	Commerce, MDS University, Ajmer	Ms. Vinod Gupta	<b>Awarded 1996</b>
2. राजस्थान राज्य पथ परिवहन निगम में मानव संसाधन प्रबन्ध	Commerce, MDS University, Ajmer	Ms. Kaushal Kanwar	<b>Awarded 1996</b>
3. Accountability of Public Enterprises in Rajasthan	Commerce, MDS University, Ajmer	Mr. Shailendra Singh Charan	<b>Awarded 2004</b>
4. Tobacco Industry in Nepal – A Comparative Financial Appraisal of Public & Private Sector	Commerce, MDS University, Ajmer	Mr. Durga Nand Chaudhary	<b>Awarded 2004</b>
5. Working Capital Management in Cement Industry of Nepal – A Case Study	Commerce, MDS University, Ajmer	Mr. Madhav Bahadur Shrestha	<b>Awarded 2004</b>
6. Meeting Residentials Needs in Rajasthan	Commerce, MDS University, Ajmer	Ms. Kalpana Jyotiana	<b>Awarded 2004</b>
7. Management of Working Capital in Cement Industries of India	Commerce, MDS University, Ajmer	Ms. Sulaxmi Toshniwal	<b>Awarded 2005</b>
8. Cyber Loafing in Work Place – An Exploratory Study	Commerce, MDS University, Ajmer	Ms. Monika Prakash	<b>Awarded 2005</b>
9. भारत के लघु उद्योग क्षेत्र के विकास एवं वित्त पोषण में भारतीय लघु उद्योग विकास बैंक की भूमिका की मूल्यांकन	Commerce, MDS University, Ajmer	Ms Mamta Sharma	<b>Awarded</b>
10. पर्यावरण लेखांकन अंकेक्षण एवं प्रकटीकरण व्यवहार (चयनित निगमों का एक अध्ययन)	Commerce, MDS University, Ajmer	Ms. Rashmi	<b>Awarded</b>

11.	Financial Analysis of Life Insurance Corporation of India (Special reference to Ajmer Division)	Commerce, MDS University, Ajmer	Ms Vandana Tahiliani	<b>Awarded</b>
12.	लघु उद्योगों के विकास में भारतीय लघु उद्योग विकास बैंक (सिडबी) का विश्लेषणात्मक अध्ययन (विशेषतः राजस्थान के संदर्भ में)	Commerce, MDS University, Ajmer	Ms. Amita Garg	<b>Awarded</b>
13.	भारत में सड़क परिवहनों के वित्तीय संसाधनों का प्रबंध (एक विश्लेषण)	Commerce, MDS University, Ajmer	Mr. Anurodh Godha	<b>Awarded</b>
14.	जनोपयोगी सेवाओं में प्रशासन एवं प्रबन्ध (राजस्थान विद्युत सेवाओं के संदर्भ में)	Commerce, MDS University, Ajmer	Mr A K Tanwar	<b>Awarded</b>
15.	Branding strategies of Small and Medium textile industries of Bhilwara district	Commerce, MDS University, Ajmer	Ms Nandita Verma	<b>Awarded 2010</b>
16.	E-security architectures and war strategies: A special reference to Indian Financial Sector	Commerce, MDS University, Ajmer	Mr Rahul Saraswat	<b>Awarded 2010</b>
17.	Corporate Governance: Disclosure practices in India (A study of selected Indian Companies)	Commerce, MDS University, Ajmer	Ms Tripti Dani	<b>Awarded 2010</b>
18.	A study on financial accounting of Small and Medium Enterprises (with special reference to Ajmer, Rajasthan)	Commerce, MDS University, Ajmer	Mr R K Jain	<b>Awarded 2012</b>
19.	Changing brand equity and brand loyalty in nationalized banks – An analysis (with special reference to Ajmer)	Commerce, MDS University, Ajmer	Ms Nidhika Joshi	<b>Awarded in 2014</b>
20.	A study of strategic management and corporate effectiveness of Nepalese Commercial Banks	Commerce, MDS University, Ajmer	Mr Sanjay Kumar Shreshta	<b>Awarded 2012</b>
21.	A study of Management Control System in Nepalese Commercial Banks	Commerce, MDS University, Ajmer	Jitendra Prasad Upadhyaya	<b>Awarded 2012</b>
22.	An Empirical Assessment of Expectation V/S Perceptions in the Delivery of Financial Service of Stock Trading Brokers in Rajasthan	Commerce, MDS University, Ajmer	Dushyant Bafna	<b>Ongoing Enrolled in 2012</b>
23.	Study of Entrepreneurialism among technology and engineering students in Rajasthan	Commerce, MDS University, Ajmer	Ramesh Chandra Devrath	<b>Awarded in 2014</b>

b. From other institution / universities

**NIL**

40. Number of post graduates students getting financial assistance from the University.

**NIL**

41. Was any need assessment exercise undertaken before the development

**NIL**

42. Does the department obtain feedback from

**NIL**

- Faculty on curriculum as well as teaching –learning-evaluation? If yes, how does the department utilize the feedback ?
- Students on staff, curriculum and teaching-learning – evaluation and how does the department utilize the feedback?
- Alumni and employers on the programmes offered and how does the department utilize the feedback?

43. List the distinguished alumni of the department (maximum)

S. No	Name of the students	Placement place	Post	Salary if any
1.	Dr. Anurodh Godha	Vardhman Mahaveer Kota Open University, Kota	Assistant Professor	As per U.G.C. norms
2.	Dr. Kalpana Jyotiana	Government College, Ajmer	Assistant Professor	As per U.G.C. norms
3.	Dr. Monica Prakash	Indian Institute of Tourism and Travel Management	Associate Professor	As per U.G.C. norms
4.	Dr. Madhav Bahadur Shrestha (Ph.D Scholar)	U.S.A.	Professor	As per U.G.C. norms

44. Give details of student enrichment programmes (special lecture/ workshops/ seminar) involving external experts.

**NIL**

45. List the teaching methods adopted by the faculty for different programmes.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

47. Highlight the participation of students and faculty in extension activities.

48. Give details of “beyond syllabus scholarly activities” of the department. **Nil**

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

**Nil**

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

**Nil**

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

52. Future plans of the department.

**FACULTY OF EDUCATION**  
**EDUCATION**  
**LIBRARY & INFORMATION SCIENCE**



**MAHARSHI DAYANAND SARASWATI**  
**UNIVERSITY**  
**AJMER**

**शिक्षा**

**विभाग**

**Department  
of  
Education**

1. Name of the Department – Department of Education
2. Year of establishment - 2007
3. Is the Department part of a School/Faculty of the university? - Yes
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) – M.Ed., B.Ed.
5. Interdisciplinary programmes and departments involved --
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
7. Details of programmes discontinued, if any, with reasons – M.A. (Edu), M.Phil. (As per the University decision)
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System – Annual system in both of the programmes
9. Participation of the department in the courses offered by other departments
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Sanctioned	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	Nil		
Associate Professor	Nil		
Asstt. Professor	Nil		
Others	1 Clerck+ 1 Class IV	02	

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance (profile of Guest Faculty)

Name of the Guest Faculty	Qualification	Experience, Specialization	M.Phil. / Ph.D. guided in last 4 years
Dr R.K.S. Arora	M.Ed., Ph.D.(Edu)	30 years; Retired Faculty Member, Regional Institute of Education (NCERT), Ajmer; Principal	
Dr Ramesh Pareek	M.A.(History), M.Ed., Ph.D.(Edu) -1985, DEPA	15 years, Dy. Director (Retd), Department of Education, Rajasthan	
Dr Mamta Sharma	M.Ed., Ph.D.(Edu)	4 years	
Dr Kalindi Lalchandani	M.Ed., Ph.D.(Edu)	4 years	
Dr Vishnu Kumar	M.Ed., UGC-NET (Edu); Ph.D. (Pol Sc); M.L.I.S., UGC-NET (Library & Inf. Sc.)	5 years	10 M.Phil
Mrs. Preeti Sharma	M.A. (Hindi),	4 Years	

	M.A. (Sanskrit), M.Phil. (Sanskrit), M.Ed., RTET		
Mr. Devki Nandan Kumawat	M.Sc.(Zoology), M.Ed., GNIIT Certification	02 years	
Mr. Nemi Chand Tamboli	M.A. (Hindi), M.Phil. (Hindi), UGC-NET (Hindi), M.Ed.	8 years	
Ms. Geetika Premchandani	M.A.(English), M.Ed.	2 years	
Dr. Amita Garg	M.Com., Ph.D., B.Ed.	3 years	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors –

13. Percentage of classes taken by temporary faculty – programme-wise information – 100% classes by temporary faculty

14. Programme-wise Student Teacher Ratio - 4 : 25 (M.Ed.); 8 : 50(B.Ed.)

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual –  
1 clerk and 1 class IV are sanctioned and available

16. Research thrust areas as recognized by major funding agencies –

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. –

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration

b) International collaboration

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

20. Research facility / centre with

- state recognition
- national recognition
- international recognition

21. Special research laboratories sponsored by / created by industry or corporate bodies

22. Publications:

\*Number of papers published in peer reviewed journals (national / international)

Sr. No.	Title of the Publication	Published in/as	Publisher
1	Chapter- Impact of Globalization on Socio Value & social intuitions (p.no. 105) / Vishnu Kumar	The impact of Globalization on Economic, Political and Socio-cultural domains in India (Ed. 2012)	UGC & RVVSP Shramjeevi College, Ajmer

23. Details of patents and income generated
24. Areas of consultancy and income generated
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad
26. Faculty serving in  
a) National committees b) International committees c) Editorial Boards d) any other (please specify)
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
28. Student projects
- percentage of students who have done in-house projects including inter-departmental projects
  - percentage of students doing projects in collaboration with other universities /industry/institute
29. Awards / recognitions received at the national and international level by
- Faculty
  - Doctoral / post doctoral fellows
  - Students
30. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

### Monday, December 08, 2014

Seminar on Jammu & Kashmir : Social and economic scenario

Chairperson: Prof. Kailash Sodani Vice-Chancellor, M.D.S. UNIVERSITY

Organizing Secretary: Dr. Ashwini Tiwari;

Keynote Speaker: Shri Arun Kumar, Director, Jammu-Kashmir Adhyayan Kendra, New Delhi.

INVITED SPEAKER: Shri Ashutosh Bhatnagar on 'Jammu – Kashmir: Geographical and Cultural Uniformity';

Session Chairpersons: Prof. R.K.S. Arora, Retired Faculty Member, Regional Institute of Education (NCERT), Ajmer; Dr Ramesh Pareek, Deputy Director (Retd.), Education, Govt. of Rajasthan.

31. Code of ethics for research followed by the departments
32. Student profile programme-wise: (session 2014-15)

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Ed.	Controlled by State Level Entrance Test	12	12	8	12

B.Ed.	Controlled by State Level Entrance Test	76	23	72	23
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## 33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Ed.	25%	75%	Nil	Nil
B.Ed.	40%	60%	Nil	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

## 35. Student progression

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
□ Campus selection	
□ Other than campus recruitment	
Entrepreneurs	

## 36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	70%
from other universities within the State	20%
from universities from other States	10%
From universities outside the country	

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period = 02

38. Present details of departmental infrastructural facilities with regard to

- Library – Approx. 800 books in the discipline of education at the Central Library.
- Internet facilities for staff and students – Not available at the Department
- Total number of class rooms - 05
- Class rooms with ICT facility – not available
- Students' laboratories – not available
- Research laboratories– not available

39. List of doctoral, post-doctoral students and Research Associates
  - a) from the host institution/university – nil
  - b) from other institutions/universities - nil
40. Number of post graduate students getting financial assistance from the university. - nil
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. – no any
42. Does the department obtain feedback from - no
  - a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10) – inf. not compiled
44. Give details of student enrichment programmes (special lectures / workshops /seminar) involving external experts.
45. List the teaching methods adopted by the faculty for different programmes.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
47. Highlight the participation of students and faculty in extension activities.
48. Give details of “beyond syllabus scholarly activities” of the department.
48. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. – as of the university
49. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
50. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
51. Future plans of the department.

**पुस्तकालय  
एवं  
सूचना विज्ञान  
विभाग  
DEPARTMENT  
OF  
LIBRARY  
&  
INFORMATION  
SCIENCE**

1. Name of the Department – Department of Library & Information Science
2. Year of establishment - 2006
3. Is the Department part of a School/Faculty of the university? - Yes
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) – Master of Library & Information Science
5. Interdisciplinary programmes and departments involved --
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
7. Details of programmes discontinued, if any, with reasons
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
9. Participation of the department in the courses offered by other departments
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)
11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance (profile of Guest Faculty)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
Dr. B.K. Jha,	M.L.I.S., Ph.D.	Librarian, Regional Institute of Education (NCERT), Ajmer	Classification Practice, Lib. Automation, LIBSYS software	14 years	2 M.Phil.
Mr. Kamlesh Patel	M.L.I.S., M.Phil.	Librarian, R.P.S.C., Ajmer	CLASSIFICATION (Practice)	25 years	
Mr. O. P. Vaishnav	M.L.I.S., M.A.	Librarian, SamratPrithviraj Chauhan Government College, Ajmer	CATALOGUING (Practice)	24 years	
Mr. Suresh Kumar	M.C.A.		Computer basics and practicals	4 years at B.Ed., etc.	
Dr. Vishnu Kumar	M.L.I.S., UGC-NET	Contractual Faculty, R.I.E. (NCERT), Ajmer	Knowledge Resources and Services	7 years	
Mr. Devendra Singh Jhala	M.L.I.S., M.Phil.	Librarian, Mayo College, Ajmer	Knowledge Resources and Services	8 years	
Dr. Ashwini Tiwari	M.L.I.S., UGC-NET, DCA, Ph.D.	Deputy Librarian, MDSU. In-Charge, DLIS.	Lib. Automation, SOUL software, Bibliometrics	19 years	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors – N.A.
13. Percentage of classes taken by temporary faculty – programme-wise information – 80%
14. Programme-wise Student Teacher Ratio - 10 : 1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual – UDC and Class IV of library assist. As per SFS.
16. Research thrust areas as recognized by major funding agencies – N.A.
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. – not having
18. Inter-institutional collaborative projects and associated grants received
  - a) National collaboration
  - b) International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.
20. Research facility / centre with
  - state recognition
  - national recognition
  - international recognition
21. Special research laboratories sponsored by / created by industry or corporate bodies
22. Publications:

\* Number of papers published in peer reviewed journals (national / international) = 04

Sr. No.	Title of the Publication	Published in/as	Publisher
1.	<i>VARGIKARAN SHRENIYAN</i> (Categories in Classification).	<i>GRANTHALAYA VIGYAN</i> , Vol. 26-27; 1995-96, p 55-70. (Released in July 1997)	Prof.Kaula Endowment for Library & Information Science, Guntur. Ed by Dr S.P. Sood, Jaipur ISSN: 0973564
2.	Ranakpur Temples : a treasure house of art & architecture	<i>Journal of the Oriental Institute / Pranav Dev, Lecturer (History), Government College, Jhalawar, Rajasthan (the undersigned contributed for photography), Vol. 1-2 (1-2), Sept.- Dec., 2002, p 35-45</i>	Maharajah Sayajirao University, Vadodara, Gujarat. ISSN: 00305324
3.	<i>Digital YugmeinBauddhikSampadaSarakshana</i>	<i>GRANTHALAYA VIGYAN</i> , Vol. 36 (1-2); 2005, p 69-78. (Released in April 2007)	Prof.Kaula Endowment for Library & Information Science, Guntur. Ed by Dr S.P. Sood, Jaipur

			ISSN: 0973564
4.	Measuring Indian Contributions to Library & Information Science	<i>Library Progress (International)</i> Vol.33 (1); Jan.-June 2013, p 111-21 (Released in Aug. 2013)	Library Progress (International), Bulletin of Pure & Applied Sciences, New Delhi ISSN: 09701052

## \* Monographs = 01

1.	Bibliometrics, informetrics and scientometrics : opening new vistas of information science.	(Self)	RBSA Publishers, Jaipur. 2006 ISBN: 8176113247
2	National Seminar on Re-Defining the Strategic Role of Libraries in Indian Culture and Modern Society.  Paper presented: Web based Information Sources Obtained Best Paper Award	Indian Council of Social Science Research, New Delhi Under joint auspices of Mohanlal Sukhadia University Library, Udaipur and Intellectuals Society for Socio-Techno Welfare, Ghaziabad	30-31 July, 2015

## \* Chapters in Books = 04

Sr. No.	Title of the Publication	Published in/as	Publisher
1.	Towards Common Communication Format	LIBRARIANSHIP : TODAY AND TOMORROW (Dr. S.C. Verma Festschrift) / Ed by Sharma, U.C. and Rawtani, M. R.), p 209-29.	EssEss Pub., New Delhi. 1997 ISBN : 8170002133
2.	Application of Internet for Information Resources: an up-to-date dependable tool.	Information Technology for e-Libraries / Ed by Vyas, Kailash Narain. p 11-18.	Raj Pub. House, Jaipur. 2005 ISBN: 8187248009
3.	Protection of Intellectual Property in Digital Era	Information Literacy in the Digital Age / Ed by C Lal.p 7-18	EssEss Pub., New Delhi. 2008 ISBN: 9788170005442
4.	Measuring Indian Contributions to Library & Information Science	<i>Library Progress (International)</i> Vol.33 (1); Jan.-June 2013, p 111-21 (Released in Aug. 2013)	Library Progress (International), Bulletin of Pure & Applied Sciences, New Delhi ISSN: 09701052

\* Edited Books = Nil

\* Books with ISBN with details of publishers (as given above)

23. Details of patents and income generated

24. Areas of consultancy and income generated

25. Faculty selected nationally / internationally to visit other laboratories / institutions/industries in India and abroad

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please

specify)

Member of Subject Expert Group of the National Council for Educational Research & Training, New Delhi for training programmes (specially library automation and digital services) of SCERT, SIE and school librarians. Delivered various lectures, practical sessions.

Nodal Officer, All India Survey on Higher Education (Ministry of H.R.D.); Coordinator, AISHE Cell, MDSU. The Cell works for compilation of statistical details of the campus and online uploading at the web portal <aishe.gov.in>; assist and supervise all the affiliated colleges for filling and uploading their Data Capture Format.

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
28. Student projects
  - percentage of students who have done in-house projects including inter-departmental projects
  - percentage of students doing projects in collaboration with other universities/ industry / institute
29. Awards / recognitions received at the national and international level by
  - Faculty
  - Doctoral / post doctoral fellows
  - Students
30. Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any.
31. Code of ethics for research followed by the departments
32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.L.I.S. (2015-16)	17	2	8		

### 33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.L.I.S.	100%	Nil	Nil	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.
35. Student progression

### 36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	48 %
from other universities within the State	17%
from universities from other States	35%
from universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period
38. Present details of departmental infrastructural facilities with regard to
- Library – Having collection of 300 books, classification schemes, cataloguing codes in the field of library & inf. sc.
  - Internet facilities for staff and students – Not available
  - Total number of class rooms – 01
  - Class rooms with ICT facility – 01 (Laptop, LCD, tripod screen available)
  - Students' laboratories
  - Research laboratories
39. List of doctoral, post-doctoral students and Research Associates
- from the host institution/university
  - from other institutions/universities
40. Number of post graduate students getting financial assistance from the university.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
42. Does the department obtain feedback from
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10)
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

45. List the teaching methods adopted by the faculty for different programmes.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
47. Highlight the participation of students and faculty in extension activities.
48. Give details of “beyond syllabus scholarly activities” of the department.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
52. Future plans of the department.

# FACULTY OF JOURNALISM AND MASS COMMUNICATION

JOURNALISM & MASS  
COMMUNICATION



MAHARSHI DAYANAND SARASWATI  
UNIVERSITY

AJMER

कप्तान दुर्गा प्रसाद चौधरी

पत्रकारिता

एवं

जन संचार

विभाग

KAPTAN  
DURGA PRASAD CHOUDHARY  
DEPARTMENT  
OF  
JOURNALISM  
&  
MASS COMMUNICATION

1. Name of the Department:  
**Kaptan Durga Prasad Choudhary Department of Journalism and Mass Communication**
2. Year of establishment: **2008**
3. Is the Department part of a School/Faculty of the university?  
**Yes, Faculty of Journalism and Mass Communication**
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)  
**Master of Arts (Journalism and Mass Communication)**
5. Interdisciplinary programmes and departments involved: **NA**
6. Courses in collaboration with other universities, industries, foreign institutions, etc. **NA**
7. Details of programmes discontinued, if any, with reasons  
**Diploma in Media Management due to lack of Demand**
8. Examination System: ~~Annual/Semester/Trimester/Choice Based Credit System~~  
**Semester System**
9. Participation of the department in the courses offered by other departments  
**None**
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others) : No appointment has been made till date (As MA(JMC) is self financing course) **Establishment section has this information.**
11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance: N/A
12. List of senior Visiting Fellows, adjunct faculty, emeritus professors **NA**
13. Percentage of classes taken by temporary faculty – programme-wise information  
**100% by visiting faculty and Journalists**
14. Programme-wise Student Teacher Ratio **N/A**
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	Sanctioned	Filled	Actual
<b>Technical Support Staff</b>			
<b>Administrative Staff</b>			<b>One Clerk</b>

16. Research thrust areas as recognized by major funding agencies **N/A**
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and

grants received project-wise. N/A

18. Inter-institutional collaborative projects and associated grants received **None**
  - a) National collaboration
  - b) International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. N/A
20. Research facility / centre with
  - state recognition **None**
  - national recognition **None**
  - international recognition **None**
21. Special research laboratories sponsored by/created by industry or corporate bodies  
**None**
22. Publications: N/A
23. Details of Patents and Income Generated **NA**
24. Areas of Consultancy and Income Generated **NA**
25. Faculty Selected nationally/ Internationally to visit other laboratories/ institutions/ industries in India and Abroad: N/A
26. Faculty Serving in
  - a) National Committees: N/A
  - b) International Committees: N/A
  - c) Editorial Boards: N/A
  - d) Any Other (please specify): N/A
 Membership in Advisory Boards: N/A
27. Faculty recharging strategies (UGC, ASC, Refresher/ Orientation Programs, Workshops, Training Programs and similar): N/A
28. Student projects
  - percentage of students who have done in-house projects including inter-departmental projects of the project is done under the supervision of Dr Shiv Prasad and the visiting faculty.
  - percentage of students doing projects in collaboration with other universities/ industry/institute **None**
29. Awards/recognitions received at the national and international level by N/A
  - Faculty
  - Doctoral / post doctoral fellows
  - Students
30. Seminars/ Conferences/Workshops organized and the source of funding (national /international) with details of outstanding participants, if any. Organizer of Seminars/ Training Programs/ Workshops/ ESDPs N/A

31. Code of ethics for research followed by the departments: N/A

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MJMC Part II	28	19	01	RA	RA
MA(JMC) Part I	14	06	02	RA	RA

33. Diversity of Staff

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students From universities outside the State	% of Students from other countries
MJMC Part II	65	30	5	--
MA(JMC) Part I	87.5	-	12.5	--

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. NA

35. Student progression: N/A

36. Diversity of staff: N/A

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period **None**

38. Present details of departmental infrastructural facilities with regard to

- |   |            |
|---|------------|
| a) Library                                    | No Library |
| b) Internet facilities for staff and students | No         |
| c) Total number of class rooms                | 02 rooms   |
| d) Class rooms with ICT facility              | None       |
| e) Students' laboratories                     | None       |
| f) Research laboratories                      | None       |

39. List of doctoral, post-doctoral students and Research Associates: N/A

- from the host institution/university one,
- from other institutions/universities

40. Number of post graduate students getting financial assistance from the university.nil

41. Was any need assessment exercise undertaken before the development of new

programme(s)? If so, highlight the methodology. **Through Board of Studies**

42. Does the department obtain feedback from **Yes Through Informal Means**
- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? **For betterment of teaching learning processes**
  - Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? **Yes, for improvement**
  - Alumni and employers on the programmes offered and how does the department utilize the feedback? **Yes, for improvement**
43. List the distinguished alumni of the department (maximum 10)

S.No.	Name	Designation	Organisation	Location
1.	K.K Tanwar	Development Officer	LIC of India	Ajmer
2.	Aswini Thakur	PRO	Army	Delhi
3.	Neeta Joshi	Rajya Sabha Reporter	DD News	Delhi
4.	Saroj Singh Kaled	Sub Editor	Amar Ujala	Delhi

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.  
UGC sponsored National Seminar on Changing face of Media and its relevance to Society organised on March 28, 2013 and the external experts was Mr. Sunny Sebestin, Vice Chancellor, Haridev Joshi Patrakarita Visvavidyalay Jaipur; Senior Journalist Shri Narayan Singh Bareth, Prof. Sanjeev Bhanawat, Head Deptt. of Journalism University of Rajasthan Jaipur, Shri Deen Bandhu Choudhary, Owner and Chief Editor, Dainik Navjyoti Ajmer and Shri Kamlesh Meena, ARO, IGNOU Regional Centre Jaipur.
45. List the teaching methods adopted by the faculty for different programmes.  
**Lecture method, presentation, and Discussion on various Contemporary issues.**
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? **Through continuous evaluation like regular internal tests.**
47. Highlight the participation of students and faculty in extension activities. N/A
48. Extension Lectures organised by : N/A
48. Give details of "beyond syllabus scholarly activities" of the department. N/A
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. **No**
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied. N/A
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

### **Strengths**

1. University Program,
2. The MA (JMC) is the only regular course which is offered by the University in the city of Ajmer.
3. The teaching is done by working journalist thus it transfers the practical knowledge to the students on various issues.
4. The MJMC Program is now 07 year old and matured
5. Alumni who have passed out from this Department is a major support, guidance base

### **Opportunities Facing the Department of Journalism:**

In the face of fierce competition in the market the employability of the student is becoming a daunting task. The student intake is also need to be strengthened as it is a self financing course.

### **Serious Challenges and Weaknesses facing the Department of Journalism and Mass Communication**

In view of the huge Strengths and Opportunities facing the Department, the real Challenge before the Department is to be able to meet the following major Weaknesses which are not under the Control of Academic Leadership of Head/Incharge, Department of Journalism and Mass Communication, namely:

1. While one Post graduate Programs are being run by the Department namely Master of Arts (JMC) ONLY one CLASS ROOMS ARE AVAILABLE, THERE ARE NO SEPARATE ROOMS FOR SMALL GROUP DISCUSSION IN KEEPING WITH THE NATURE OF THE PROGRAMS
2. THERE IS NO SEPARATE SPACE/ ROOM FOR DEPARTMENTAL LIBRARY which is a must for Programs as elsewhere. There is no media lab where the student can get the practical exposure.
3. THERE IS NO SEPARATE SPACE/ ROOM FOR THE SEMINAR HALL where all the students of the Department can be seated for attending to external guest lecture/seminar/workshop/special lectures as elsewhere.
4. THERE IS NO PROPER ROOM FOR THE STUDENT COMPUTER LABORATORY
5. THERE IS ONLY ONE CLERK IN THE DEPARTMENT AND UNFORTUNATELY HE DOES NOT KNOW HOW TO OPERATE COMPUTER OR PERIPHERALS, there is no Steno, no Office Assistant, no Section Officer in the Department.

**SPECIAL NOTE: N/A**

### **52. Future plans of the department.**

Unless the above mentioned very serious infrastructural, staff bottle necks are sorted out by the University Administration no further initiatives are feasible to be planned at all.

# FACULTY OF LAW

LAW



MAHARSHI DAYANAND SARASWATI  
UNIVERSITY

AJMER

विधि

विभाग

DEPARTMENT  
OF  
LAW

1. Name of the Department : LAW
2. Year of establishment : 2007
3. Is the Department part of a School/Faculty of the university? : YES
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) : P.G. LLM
5. Interdisciplinary programmes and departments involved -
6. Courses in collaboration with other universities, industries, foreign institutions, etc. -
7. Details of programmes discontinued, if any, with reasons -
8. Examination System: Annual
9. Participation of the department in the courses offered by other departments: P.G.D.E.L.
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others) No permanent faculty

Designation	Sanctioned	Filled	Actual (including CAS & MPS)
Professor			
Associate Professor			
Assistant Professor			
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D.
Dr. R.S. Agarwal	LLM, Ph.D.	Retired lecturer on contract assignment	Constitutional Law	36 Yrs.	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors : NIL
13. Percentage of classes taken by temporary faculty – programme-wise information :100%
14. Programme-wise Student Teacher Ratio 1:40
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual -
16. Research thrust areas as recognized by major funding agencies -
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. -

18. Inter-institutional collaborative projects and associated grants received -
  - a) National collaboration
  - b) International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.
20. Research facility / centre with
  - state recognition
  - national recognition
  - international recognition
21. Special research laboratories sponsored by / created by industry or corporate bodies
22. Publications:
  - \* Number of papers published in peer reviewed journals (national / international)
  - \* Monographs
  - \* Chapters in Books
  - \* Edited Books
  - \* Books with ISBN with details of publishers
  - \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
  - \* Citation Index – range / average
  - \* SNIP
  - \* SJR
  - \* Impact Factor – range / average
  - \* h-index
23. Details of patents and income generated
24. Areas of consultancy and income generated
25. Faculty selected nationally/internationally to visit other laboratories/institutions /industries in India and abroad
26. Faculty serving in
  - a) National committees
  - b) International committees
  - c) Editorial Boards
  - d) any other (please specify)
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).
28. Student projects
  - percentage of students who have done in-house projects including inter-departmental projects
  - percentage of students doing projects in collaboration with other universities/industry/ institute
29. Awards/recognitions received at the national and international level by
  - Faculty

- Doctoral /post doctoral fellows
- Students

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.
31. Code of ethics for research followed by the departments
32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
L.L.M.	28	14	8		

33. Diversity of students

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
LLM	90%	5%	5%	-

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.
35. Student progression
36. Diversity of staff: No permanent faculty
37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period
38. Present details of departmental infrastructural facilities with regard to
- Library :YES
  - Internet facilities for staff and students : YES
  - Total number of class rooms : YES
  - Class rooms with ICT facility
  - Students' laboratories
  - Research laboratories
39. List of doctoral, post-doctoral students and Research Associates
- from the host institution/university
  - from other institutions/universities
40. Number of post graduate students getting financial assistance from the university.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
42. Does the department obtain feedback from

- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10)
  44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.
  45. List the teaching methods adopted by the faculty for different programmes.
  46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
  47. Highlight the participation of students and faculty in extension activities.
  48. Give details of "beyond syllabus scholarly activities" of the department.
  49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
  50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
  51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
  52. Future plans of the department.

# FACULTY OF MANAGEMENT STUDIES

MANAGEMENT STUDIES



MAHARSHI DAYANAND SARASWATI  
UNIVERSITY

AJMER

**प्रबंध अध्ययन  
विभाग  
DEPARTMENT  
OF  
MANAGEMENT STUDIES**

1. Name of the Department: Department of Management Studies
2. Year of establishment: 1993
3. Is the Department part of a School/Faculty of the university? Yes, Faculty of Management Studies
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D. Sc., D.Litt., etc.)  
Master of Business Administration (PG), Master of Business Administration (Service Management) and Ph. D. in Management, Post Doctoral Program
5. Interdisciplinary programmes and departments involved:  
NA
6. Courses in collaboration with other universities, industries, foreign institutions, etc.  
NA
7. Details of programmes discontinued, if any, with reasons  
BBA, MBA (Executive Programme), MBA (SM) mostly for lack of Demand
8. Examination System: ~~Annual/Semester/Trimester/Choice Based Credit System~~  
Semester System
9. Participation of the department in the courses offered by other departments  
None
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate

Professors/Asst. Professors/others) : Establishment section has this information.

	Sanctioned	Filled	Actual (Including CAS & MPS)
Professor		03	01
Associate Professors		02	02
Asst. Professors			
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph D/ M Phil students guided for the last four (04) years
Prof Manoj Kumar	MBA Ph D (Management)	Professor Head, DOMS and Dean, FMS	Marketing	29 years	4 Awarded 4 (pursuing Ph.D.) 4 (currently under course work)
Prof Satish Agarwal	MBA Ph D (Management)	Professor		27 years	

	nt)				
Prof Shiv Prasad	MBA Ph D (Management)	Professor	Finance	22 years	5 awarded and 3 currently enrolled
Dr Ashish Pareek	MBA Ph D (Management)	Associate Professor	Marketing	17 years	8 awarded 1 submitted 4 pursuing Course Work
Dr Deepika Upadhyaya	MBA Ph D (Management)	Associate Professor	Human Resource Management & Entrepreneurship	17 years	5 Awarded 4 Pursuing 2 pursuing Course Work

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors  
NA

13. Percentage of classes taken by temporary faculty – programme-wise information  
(MBA about 15 %)

14. Programme-wise Student Teacher Ratio  
MBA 100:5 (20:1), MBA (SM) 12:5 (2.4:1)

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	Sanctioned	Filled	Actual
Technical Support Staff			
Administrative Staff			One Clerk

16. Research thrust areas as recognized by major funding agencies

- Microfinance
- Branding

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Name of the Teacher	Total Grant Received	Name of Funding Agency	Project Title
Dr Shiv Prasad	07.22 Lakhs	University Grants Commission (UGC)	Building Social Capital through Microfinance in India with special reference to Rajasthan State
Dr Ashish Pareek	10.83 Lakhs	University Grants Commission (UGC)	Determinant factors of Luxury Brand Consumption: A study of urban shoppers of North Western region of India
Dr Shiv Prasad		UGC Research Award for Teacher from University Grants Commission (UGC)	A Study of Service Quality, Trust and Reputation as predictors of Customer Loyalty in a Banking Environment: A Case Study of Some Public and Private Sector Banks of Rajasthan

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration  
None

b) International collaboration

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Dr Shiv Prasad has Completed Major Research Project entitled "Building Social Capital through Microfinance in India with special reference to Rajasthan State" funded by University Grants Commission, New Delhi (Letter No. F. No. -580/2009 (HRP) dated January 12, 2010) cost of the project is Rs. 7,22,882/- for duration of 2 Years and Six months.

Dr Ashish Pareek's Major Research Project (MRP) titled "Determinant factors of Luxury Brand Consumption: A study of urban shoppers of North Western region of India" funded by University Grants Commission, New Delhi (Letter No. F. No. 5-242/2014 (HRP) dated August 25, 2015) Grant for the Project is Rs. 10,83,000/- for Three years w.e.f. 1/7/2015 to 30/6/2018.

20. Research facility / centre with

- State recognition

None

- National recognition

None

- International recognition

None

21. Special research laboratories sponsored by / created by industry or corporate bodies

None

22. Publications:

Name	Publications					
	Number of papers published in peer reviewed journals (National/ International)		Monographs	Chapters in Books (Study Material)	Edited Books	Books
	International	National				
Prof Manoj Kumar	06	06	None	None	None	None
Prof Satish Agarwal	No Information	No Information	No Information	No Information	No Information	No Information
Dr Shiv Prasad		18	None	04	None	04
Dr Ashish Pareek	03 (01*,01**,01)	07 In Journals 14*** Full Papers in Conference Proceedings of International and National level in print & CD ROM	None	05	02 (ISBN 023-032-870-9) (ISBN 978-93-84898-84-7)	None

Dr Deepika Upadhyaya	04	08	None	05	02	01
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\* Impact Factor 2.42      \*\* h-Index 14

\*\*\* One Paper was adjudged the Third Best Research Paper of the conference and bagged certificate, citation and cash prize of Rs 10,000/-.

- \* Number of papers published in peer reviewed journals (national / international)
- \* Monographs
- \* Chapters in Books
- \* Edited Books
- \* Books with ISBN with details of publishers
- \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- \* Citation Index – range / average
- \* SNIP
- \* SJR
- \* Impact Factor – range / average
- \* h-index

#### Publications of Professor Manoj Kumar

1. Kumar Manoj, Mishra Dhvani "Ajmer is it ready for a Smart City, Paper accepted for presentation at the Nirma International Conference, Nirma University, Ahmedabad and for inclusion in refereed conference proceedings, Jan 2016
2. Shweta Jha, Manoj Kumar "Leader- Member as a predictor of employee turnover, Review of HRM, Vol 4, no. 1, Liberal Press, Oct 2015, ISSN: 2249-4650
3. Kumar Manoj "*Emerging Challenges Confronting Management Education in India*" Paper published in Pacific Hospitality Review, Jan-July, 2015
4. Kumar Manoj, Ms Chhaya Wadhwa "Role of Work Family Conflict and Job Satisfaction in Turnover Intentions of Women Managers", paper in Global Management Horizons, vol III, Jan-Dec 2014
5. Kumar Manoj "*Elements of World Class Business Schools – An Indian Perspective*" paper included as a part of refereed conference proceedings at the Las Vegas International Academic Conference held at Las Vegas, Nevada, USA, October 15-17, 2012
6. Kumar Manoj "*Social Media as the New Marketing Buzzword*" paper included as a part of refereed conference proceedings at the Las Vegas International Academic Conference held at Las Vegas, Nevada, USA, October 15-17, 2012
7. Kumar Manoj & Sharma Renu "*Packaging Trends in Food Processing Industry*", Consulting Ahead, A Journal of Consultancy Development Center, New Delhi, July 2012, Volume 6 Issue 1
8. Kumar Manoj & Shweta Jha "*Revitalizing Management Education in India: A Strategic Approach*", Journal of Management and Public Policy, June 2012
9. Shweta Jha & Kumar Manoj "*Management Education in India: Issues and Challenges*", Journal of Management and Public Policy, Dec 2011
10. Kumar Manoj "*Leveraging School Unity for Competitive Advantage in India*", paper accepted for inclusion as a part of refereed conference proceedings at an International College Teaching & Learning Conference held at New Orleans, Louisiana, USA, March 14-16, 2011
11. Kumar Manoj "*A Case Study on Issues and Perspectives of Academic Administration in leading private business Schools in Jaipur (INDIA)*", paper accepted for inclusion as a part of refereed conference proceedings at an International College Teaching & Learning Conference held at New Orleans, Louisiana, USA, March 14-16, 2011
12. Kumar Manoj "*Envisioning the Entry of Foreign Based Multi-brand Retail Chain Store Organizations in India- An Impact Audit*" paper included as a part of refereed conference proceedings at the Las Vegas International Business and Economics Research Conference held at Las Vegas, Nevada, USA, October 11-13, 2010
13. Kumar Manoj "*Challenges of using Case Method in Private Business Schools in India*" paper included as a part of refereed conference proceedings at the International College Teaching & Learning Conference held at Las Vegas, Nevada, USA, October 11-13, 2010

## Publications of Professor Shiv Prasad:

<b>S. No.</b>	<b>Title of Research Paper/ Article</b>	<b>Name of Journal and Place of Publication</b>	<b>ISSN No</b>	<b>Duration</b>	<b>Detail of Publication</b>
1.	An Empirical Study of Tourists' Satisfaction in the International Pushkar Fair	International Journal of Hospitality & Tourism Systems, Publishing India Group, New Delhi (Online Access- <a href="http://www.publishingindia.co">www.publishingindia.co</a> )	ISSN: 0947-6250	Bi-Annual	Volume 7 Issue 2 December 2014, page 19-27
2.	Impact analysis of Social Capital upon Poverty Alleviation and Standard of Living of Community based Organisations in Microfinance	International Journal of Research in Management & Social Science, Emyreal Institute of Higher Education, Guwahati.	ISSN: 2322-0899	Quarterly	Volume 2, Issue 3 (IV): July – September, 2014, Page 1-12
3.	Hotel Selection Factors - An Empirical Study of Tourists Visiting Pushkar Hotels	South Asian Journal of Tourism and Heritage, SAJTH, published by Centre for Tourism and Heritage, Department of Commerce, Dayanand College Ajmer	ISSN: 0974-5432 Factor Index 1.21	Bi-Annual	July 2014, Vol. 7, No. 2, page 55-63
4.	Measurement of Tourist Satisfaction with Hotels in Pushkar	JOHAR – Journal of Hospitality Application & Research, Department of Hotel Management, BIT-Mesra, Ranchi	ISSN: 0973-4538	Bi-Annual	Vol. 9 No. 1, page 14-27
5.	Changing Face if Buyers Behaviour towards on line shopping of Financial Products in India (A Case Study of Rajasthan State)	AIMA e-Journal of Management and Research, New Delhi	ISSN: 0974– 9497	Quarterly	February 2014, Volume 8 Issue 1/4
6.	Application of EFQM Excellence Model on Telecom Industry in India (A Case Study of BSNL & Idea Cellular)	The Indian Journal of Business Administration, Department of Business Administration, Faculty of Commerce and Management Studies, Jaswant Campus, Jai Narain Vyas University Jodhpur	ISSN: 0975-6825	Annual	Vol. 9, 2013, Page 48-68
7.	The Impact of Cultural Attractions and Amenities in Building Image of a Tourist Destination- A Study of Tourists Visiting Jaipur	Indian Journal of Applied Hospitality & Tourism Research, Banarasidas Chandiwala Institute of Hotel Management & Catering Technology, New Delhi	ISSN: 0975-4954	Annual	January 2014, Vol. 6, Page 3-9
8.	An Empirical Study on Financial Health of ITDC through 'Z' Score Analysis	Indian Journal of Accounting, Journal of Indian Accounting Association, Ahmedabad	ISSN: 0972-1479	Bi-Annual	June 2013, Vol. XLIV(2), Year: 44, page 26-34
9.	Balance Score Card: A way to implement Strategy in turbulent times (A Case Study of R. K. Marbles)	Indian Journal of Applied Research, 8-A, BANAS, Opp. SLU College, Paldi, Ahmedabad	ISSN: 2249-555X Impact Factor: 0.8215	Monthly	May 2013, Vol. 3, Issue 5, page 1-5

10.	An Empirical Study of e-CRM Practices on Indian Bank Service Quality (A Case Study of ICICI Bank)	Prabandhgyan : International Journal of Management, Jagan Institute of Management Studies, Sitapura Industrial Area, Jaipur	ISSN: 2319-6351	Annual	Issue-March 2013, page 9-22
11.	Impact of Corporate Accountability on Public Governance in India	PARIPEX- Indian Journal of Research , published by PARIPEX-IJR, Opp. SLU College, Paldi, Ahmedabad	ISSN: 2250-1991	Monthly	March 2013, Vol. 2, Issue 3, page 65-67
12.	An Empirical Study of Emerging Dimensions of Tourism in India	South Asian Journal of Tourism and Heritage, SAJTH, published by Centre for Tourism and Heritage, Department of Commerce, Dayanand College Ajmer	ISSN: 0974-5432 Factor Index 1.21	Bi-Annual	January 2013, Vol. 6, No. 1, page 145- 158
13.	Use of Geographic Information System for Retail Business Analysis	AIMA e-Journal of Management and Research, New Delhi	ISSN: 0974 – 9497	Quarterly	August 2012, Volume: 6 Issue: 3/4
14.	Talent Management: A Propellant to Achieve Business Excellence through Talent Appraisal & Control	AIMA e-Journal of Management and Research, New Delhi	ISSN: 0974 – 9497	Quarterly	November 2010 Volume: 4 Issue: 4/4
15.	Knowledge Creation Process & Practices and Organizational Learning: A Corridor for Reviving Value Chain Components	AIMA e-Journal of Management and Research, New Delhi	ISSN: 0974 – 9497	Quarterly	August 2010 Volume: 4 Issue: 3/4
16.	Quality Management System Practices in an Organisation: A Gateway to success	ACME journal of Management Brilliance, Biannual referred International Journal, Ajmer	ISSN: 0976-5980	Bi-Annual	Vol: II, Issue: II, July-Dec.2011
17.	Value Creation Mechanism and climate issues: An efficient Approach for conquering synchronized customer value and sustainable development	International Journal of Research in Finance and Marketing, An E-Journal (Access on: <a href="http://www.mairec.org">http://www.mairec.org</a> )	ISSN: 2231-5985	Quarterly	volume 01, issue 03, July 2011

### Books Published

1. Khandelwal N.M., Prasad Shiv; textbook on 'Lekha Shastra' for class XI approved by Board of Secondary Education, Rajasthan, in 1998-1999 and onward, published by Maya Publication, Jaipur.
2. Prasad Shiv; 'Financial Performance of Rajasthan Tourism Development Corporation: An Appraisal' (ISBN No. 978-3-659-20094-6) published in July 31, 2012 by LAB Publishing House, Germany.
3. Kumari Veena, Upadhyaya Deepika and Prasad Shiv; 'Women Empowerment and Development of Micro Finance: A Case study of Rajasthan (India)' (ISBN No. 978-3-659-20063-2) published in January 2012, by LAB Publishing House, Germany.
4. Prasad Shiv; 'Social Capital & Micro Finance' (ISBN No. 978-81-7611-713-5) published by RBSA Publishers, Jaipur, Rajasthan

### Articles in Edited Books

1. Prasad Shiv, Kumari Veena; "Self-Help Groups and its impact on Socio-Economic Empowerment of Women in India (A Case Study of Rajasthan State)" published in Edited Book 'Role of Women in Indian Economy', from page 134 to 152, Year of Publishing 2013, (ISBN 978-93-80820-37-8), V L Media Solutions, New Delhi.

2. Prasad Shiv, Bhatia Vinita; "Luring International Tourists to Rajasthan- A case of Pushkar fair" published in Edited Book 'Management, Leadership & Corporate Governance', from page 35-41, Year of Publishing 2013, (ISBN 978-81-9046357-7), Swastik Publishing House, New Delhi.
3. Prasad Shiv; "The Dynamic World of Mergers and Acquisitions" published in Edited Book 'Merger and Acquisition: Indian Scenario', from page 50 to 77, Year of Publishing 2007, (ISBN 81-7391-920-8), Kaniska Publishers and Distributors, New Delhi.
4. Prasad Shiv; "Economic Value Added: Concept and Applications" published in Edited Book 'Economic Value Added', from page 1 to 28, Year of Publishing 2009, (ISBN 978-81-8450-210-7), Deep & Deep Publications Pvt. Ltd., New Delhi.

### Courses Developed

1. Written two Units; Unit – 17 Sources of Long Term Finance and Unit – 18 Sources of Short Term Finance for BBA Vardhaman Mahaveer Open University, Kota.
2. Written two Units; Unit – 14 Marginal Costing and Unit – 15 Standard Costing & Variance Analysis for BBA – 09 Cost and Management Accounting, April 2012, ISBN No.: 978-81-8496-317-5, Vardhaman Mahaveer Open University, Kota.
3. Written two Units; Unit – 6 Measures of Central Tendency: Mean, Median and Mode Unit – 7 Measures of Dispersion for BBA – 05 Fundamentals of Business Statistics, February 2011, ISBN No.: 13/978-81-8496-272-7, Vardhaman Mahaveer Open University, Kota.
4. Written whole course of International Marketing comprising 15 units for BBA, IASE, Sardarsahar.

Publications of Dr Ashish Pareek:

### Papers published In Journals

#### International

1. Suman, N., Gupta, V., Goktan, A. B., Cheung, Y. H., Gunay, G., **Pareek, A.** (2013), "Cultural Value Orientation: Measurement Invariance in a Multi-country Sample", Journal of Managerial Issues, Volume XXV No. 3 Fall 2013, pp 264-283 (Quarterly Publication of Pittsburg State University) (**ISSN 1045-3695**) H Index: 14
2. Gupta, V. K., Turban, D., **Pareek, A.** (2012), "Differences between men and women in opportunity evaluation as a function of gender stereotypes and stereotype activation", Entrepreneurship Theory and Practice, Vol. 37, Issue 4, pp 771-788, (July 2013) Impact Factor: 2.242 Article first published online: 21 May 2012, DOI: 10.1111/j.1540-6520.2012.00512.x ISI Journal Citation Reports © Ranking: 2012: 24/116 (Business) (Online ISSN **1540-6520**).
3. Kim, Jung-Ha, **Pareek, A.** (2011), 'The Indian Outbound Market with Insight into South-Korea as Destination', Northeast Asia Tourism Research by Tourism Institute of Northeast Asia, Vol 7, No. 1, February pp. 1-21 (**ISSN 1738 -8929**).

#### National

1. Kaur, J., Upadhaya, G., **Pareek, A.** (2014), 'Corporate Governance: An Indian Perspective on Disclosures and Transparency Issues', Journal of Contemporary Research in Management (A Quarterly Journal of Contemporary Issues) Vol. 9, No. 2 April – June 2014, pp. (**ISSN 0973-9785**) Listed in EBSCO, ProQuest and Ulrich International Databases
2. Bhargava, S., **Pareek, A.** (2013), 'Service quality and its effect on Customer Satisfaction in Unorganised Retailing', International Journal of Research in Management and Social Science, Vol. 1, Issue 1 (July-September 2013), pp 89-98 (**ISSN 2322-0899**).
3. **Pareek, A.**, Tak, P. (2013), 'Role of Entertainment on Shopping Behaviour in Malls of Jaipur', Anveshak- International Journal of Management, Vol. 2, No.2, pp 201-209 (**ISSN 2278-8913**).
4. Raina, A. K., Saraswat, B.P., Upadhaya, D., **Pareek, A.** (2012), 'Entrepreneurial orientation in Tourism Industry and Local Community Empowerment – An Analysis', Entrepreneurship Business Review, Vol. 2, No. 2, pp 53-63. (**ISSN 2229-7294**).
5. **Pareek, A.**, Shivnani, T., Goel, V., Bhargava, S. (2011), 'Role of Innovation in Entrepreneurship: An analysis of small and medium enterprises in Ajmer' Entrepreneurship Business Review, Vol. 1, No. 2, pp 24-37. (**ISSN 2229-7294**).
6. Nair, Bindu, **Pareek, A.** (2011), 'A study of the various Performance Management Systems adopted by select Indian Private Sector Organisations', International Journal of Research in Commerce & Management (IJRCM) On-line, Volume No. 2 (2011), Issue No. 6 (June) (**ISSN 0976-2183**).

- Goel, V., Pareek, A., (2010), 'A basic understanding of the concept of volatility spillover', Aishwarya Research Communication edited by Seema Singh, Archana Golwalker, Aishwarya College of Education Sansthan Publication, Vol. No. 1 Part 2 pp 311-320 (ISSN 0975-3613).

### Full Paper in Conference Proceedings in print International

- Bhargava, S., Pareek, A., Upadhyaya, D., (2015), "A study on Unorganised Retail Shopping Experience in India" Conference Proceedings of 04<sup>th</sup> International Conference on Management and Economics "Insights for Sustainable Development in Emerging Economies" Faculty of Management and Finance, University of Ruhana, Matara, Sri Lanka, pp. 407-420 (Organised during 27-28 August, 2015) (ISBN 978-955-1507-39-8)
- Pareek, A., Tak, P., Saraswat, B. P., (2015), "Impact of Consumer Need for Uniqueness and Fashion Conciousness on Attitude towards Luxury Brands" Conference Proceedings of 04<sup>th</sup> International Conference on Management and Economics "Insights for Sustainable Development in Emerging Economies" Faculty of Management and Finance, University of Ruhana, Matara, Sri Lanka, pp. 439-448 (Organised during 27-28 August, 2015) (ISBN 978-955-1507-39-8)

### National

- Pareek, A., Shekhawat, H., Tak, P. (2012), "Consumption dreams and wish lists: Impact of demographic and psychographic factors" Conference proceedings of National Conference on "New Age Marketing: Changing Paradigms", IMS Publishing House, pp 12-19. (Organized on January 28, 2012) (ISBN 978-81-921148-1-1)
- Shivnani, T., Pareek, A., Mathur, R., (2012), "Mobile Number Portability: A Case Study of Ajmer", in Conference proceedings titled **Transformation and Survival of Business Organizations: Challenges and Opportunities** edited by S S Bhakar, Tarka Singh, Krishan Kant Yadav, Aashish Mehra and published by MacMillan Advance Research Series, pp. 271-283. (Organized during December 28-30, 2011) (ISBN 935-059-061-1).
- Sharma, A., Pareek, A., Bhati, N. (2011), 'Efficiency and Transparency of e-Governance in Rajasthan Tourism – A case study of Rajasthan' Conference proceedings of International Conference on e-Governance (ICEG – 2011) in conference proceedings titled '**E-Governance – Policies and Practices**' edited by Nityesh Bhatt, Akashi Aggarwal and published by Excel India Publishers, pp 260-268. (Organized during October 17-18, 2011) (ISBN 978-93-81361-42-8).
- Pareek, A., Bhargava, S., Tak, P. (2011), 'Survival Strategy for Traditional Retailers in the Era of Modern Retailing' Conference proceedings of Fifth (5<sup>th</sup>) International Conference on Services Management 2011 pp. 99-105. (Organized during May 19-21, 2011) (ISBN 978-81-309-1812-9)
- Pareek, A., Tak, P., Bhargava, S. (2011), 'Customer Perception of Retail Formats: A Study of Ajmer City', Conference proceedings of Fifth (5<sup>th</sup>) International Conference on Services Management 2011, pp 269-275. (Organized during May 19-21, 2011) (ISBN 978-81-309-1812-9)

### Full Paper in Conference Proceeding on CD ROM International

- Rishi, B., Pareek, A., Tak, P. (2014), "Social Comparison, Media habits and Ostentation of Luxury Fashion Brands Consumption", Conference Proceedings on CD ROM of the 2014 Annual Conference of the Emerging Markets Conference Board "Listening to Consumers of Emerging Markets" held at Centre for Marketing in Emerging Economies, Indian Institute of Management Lucknow, Noida Campus during January 9-11, 2014, pp 11-16 (ISBN 978-81-928560-0-1)  
*The paper was adjudged the Third Best Research Paper of the conference and bagged certificate, citation and cash prize of Rs 10,000/-.*
- Pareek, A. Tak, P. (2014), "Impact of Consumers' Need for Uniqueness Dimensions on Purchase Intentions of Luxury Brands", Conference Proceedings on CD ROM of International Conference on Research in Marketing (A Refereed International Conference) (ICRM 2013) being organized jointly by Department of Management Studies, IIT Delhi, Curtin University, Perth, Australia, XLRI Business School, Jamshedpur at Indian Institute of Technology, New Delhi during December 21-22, 2013 pp. (ISBN No. 978-1-63041-998-1)
- Pareek, A., Khangarot, L., Pareek, A. (2010), 'Succession Planning: Practices of Small Business Family Owned Firms in India', Conference Proceedings on CD ROM of 11<sup>th</sup> International Conference "Global Economy: Challenges and Perspectives" held at Faculty of Economics and Management at

Slovak University of Agriculture, Nitra, Slovak Republic during May 26-28, 2010 (**ISBN 978-80-552-0385-0**)

4. Qineti, A., **Pareek, A.**, Matejkova, E., Svabova, J.,(2010), 'Selected aspects of Agriculture developments: A comparative study for V4 countries and India', Conference Proceedings on CD ROM of 11<sup>th</sup> International Conference "Global Economy: Challenges and Perspectives" held at Faculty of Economics and Management at Slovak University of Agriculture, Nitra, Slovak Republic during May 26-28, 2010 (**ISBN 978-80-552-0385-0**)
5. Gupta, V., Goktan A. B., **Pareek, A.**, Cheung, Yu-Ha, Gunay, G. (2009), 'The relationship between culture and entrepreneurial orientation at the individual level', Conference Proceedings on CD ROM of 4<sup>th</sup> SMU Edge 2009 International Conference "Bridging the Gap IV: Entrepreneurship in Theory and Practice" held at Singapore Management University, Singapore during July 8-10, 2009 (**ISBN 978-981-08-3407-4**).

#### **National**

1. Nair, B., **Pareek, A.** (2011), 'Balanced Score Card: Boon or Bane?', Conference Proceedings on CD ROM of IC2011- International Conference on "India Emerging: Opportunities and Challenges" held at Indus Business Academy, New Delhi during February 25-26, 2011.
2. Verma, N., **Pareek, A.**, Saraswat, B. P. (2011), 'Small and Medium Enterprise (SME) Artisan Clusters: Opportunities and Challenges' Conference Proceedings on CD ROM of Ninth Biennial Conference on Entrepreneurship at Entrepreneurship Development Institute of India, Ahmedabad during February 16-18, 2011.

#### **In Edited Books**

1. Tak, P., **Pareek, A.**, (2015), "Motivation for Luxury Brand Consumption: An empirical study", in edited book titled **Marketing in a Changing and Connected World** edited by Sanjiv Mittal, Meenakshi Handa, Sanchita Bansal and published by Bloomsbury Publishing India Pvt. Ltd., pp 149-158 (**ISBN 978-93-84898-84-7**)
2. Verma, N., **Pareek, A.**, and Saraswat, B. P. (2010), "Branding in Small and Medium Entrepreneurial Ventures", in edited book titled **Brand Research** edited by Lubna Nafees, Omkumar Krishnan, Tim Gore and published by MacMillan Advance Research Series, pp. 249-260. (**ISBN 023-032-870-9**).

#### **Contribution in Study Material**

1. Entrepreneurship and Small Business Management (Study Material MP – 403 of MBA of Vardhaman Mahaveer Open University, Kota) **One Unit "Entrepreneurship Development Programmes"** (Unit 4) pp. 48-61 published by Vardhaman Mahaveer Open University, Kota (**September 2012**) (**ISBN 13/978-81-8496-354-0**).
2. Entrepreneurship and Small Scale Businesses (Study Material of BBA-12 of Vardhaman Mahaveer Open University, Kota) **One Unit 'Entrepreneurship Development Programmes'** (Unit 7) pp. 99-113 published by Vardhaman Mahaveer Open University, Kota (**April 2012**) (**ISBN 978-81-8496-319-9**).
3. Entrepreneurship and Small Scale Businesses (Study Material of BBA-12 of Vardhaman Mahaveer Open University, Kota) **One Unit 'Entrepreneurship and Role of Environment'** (Unit 6) pp. 87-99 published by Vardhaman Mahaveer Open University, Kota (**April 2012**) (**ISBN 978-81-8496-319-9**).
4. Business Environment (Study Material of BBA – 04 Course of Vardhaman Mahaveer Open University, Kota) **One Unit 'Industrial Sickness'** (Unit 10) pp. 135-140 published by Vardhaman Mahaveer Open University, Kota (**February 2011**) (**ISBN 13/978-81-8496-266-6**).
5. Business Environment (Study Material of BBA – 04 Course of Vardhaman Mahaveer Open University, Kota) **One Unit 'Industrial Policy of India'** (Unit 9) pp. 117-134 published by Vardhaman Mahaveer Open University, Kota (**February 2011**) (**ISBN 13/978-81-8496-266-6**).

Publications of Dr Deepika Upadhyaya:

#### **Papers published**

##### **In Journals with ISSN Number**

1. Upadhyaya D. and Saraswat R.N. (2010), 'Dimensions of Indian Culture, Values and Event Marketing Implications – An Analysis, South asian Journal of Tourism and Heritage., Volume 3 Number 1 January 2010, (ISSN 0974-5432).
2. Upadhyaya D. and Dadich P. (2010), 'The Constraints Faced by Women Entrepreneurs in Rajasthan' , Research Analysis and Evaluation, Volume I Issue 13, October 2010, pp 40-41, , (ISSN 0975-3486).

3. Upadhyaya D., Badlani M. and Paryani P. (2011), 'Importance of Technology in Enhancing Customer Satisfaction in Retail Insurance Market', *Review of Business and Technology Research*, Volume 4 Number 1, July 011, pp 877-889, (ISSN 1941-9414).
4. Sharma P., Chowdhary N. and Upadhyaya D. (2011), 'Corporate Responsibility Towards Society: SME Perspective', *Entrepreneurship Business Review (A Bi-annual Refereed Journal of Center for ESBM)*, Vol. 1, No. 2, July –December 2011, pp 48-55 (ISSN 2229-7294).
5. Gandhi J. and Upadhyaya D., (2012), 'Training and Developing the Workforce in Tourism SME's in Rajasthan- The Need of the Hour", *Global Journal of Finance and Management*, Volume 4 Number 5, pp 68-69, (ISSN 0975-6477).
6. Upadhyaya D., Bhatnager S., (2013), 'New Location Scheme in Mobile Ad Hic Network', *Journal of Management Value and Ethics*, Volume 3 Number 3, pp 82-93, (ISSN 2249-9512).
7. Upadhyaya D., Badlani M., (2014), 'Financial Innovation and Advancing Information Technology Values in Indian Banks', *Research Journal of Management Sciences* , ISSN 2319–1171, Vol. 3(11), 1-7, November 2014
8. Tharaney V., Upadhyaya D., (2014), 'Burgeoning Field of Edupreneurship: A Literature Review, *Pacific Business Review*, December 2014, (ISSN: 0974-438X).
9. Tharaney V., Upadhyaya D., (2015), ' Assessment of Individual's Motivational Factors and & Goals and Effect of Ecosystem on Entrepreneurship in Higher Education in Rajasthan', *Oorja* , ISSN 0974–7869, Volume 13 , Number 1, January- April 2015.
10. Tharaney V., Upadhyaya D., (2015), 'Motivational of Entrepreneurs for Venturing in Higher Education in Rajasthan', *Research Journal of Management Sciences* , ISSN 2319–1171, Vol. 4(7), 1-7, July 2015

#### **In Edited Books with ISBN Number**

1. Gandhi J. and Upadhyaya D., (2012), 'The Why and Wherefore of Faculty Attrition", in Tak P. and Shekhawat H., *Business Strategy and Economic Growth*, New Delhi: Excel Books
2. Upadhyaya, D., Gandhi, J., 'HR Issues of Small and Medium Tourism Enterprises: A Study of Ajmer Region' in book titled *Consumer Behaviour: Emerging Issues and Perspectives"* (ISBN: 978-93-5104-481-9)

#### **In Conference Proceedings with ISBN Number**

1. Upadhyaya, D., Gandhi, J., (2014) *Conference Proceedings International Conference on innovative Advances and Challenges in Management and Commerce*, ( Amity University, Utter Pradesh), ISBN: 978-93-272- 4940-8
2. Bhargava S., Pareek A., Upadhyaya D., (2015) *Conference Proceedings Fourth International Conference on Management and Economics*, ( Faculty of Management and Finance, University of Ruhuna, Matara, Sri Lanks), ISBN: 978-955-1507-39-8

#### **Contribution in Study Material with ISBN Number**

1. Upadhyaya, D. (2011), *Fundamentals of Business Statistics (Study Material of BBA – 05 Course of Vardhaman Mahaveer Open University, Kota) One Unit 'Analysis of Time Series ( Secular Trend )'* (Unit 13) pp. 207-216, published by Vardhaman Mahaveer Open University Kota (February 2011) (ISBN 13/978-81-8496-272-7).
2. Upadhyaya, D. (2012), *Entrepreneurship and Small Business Management,(Study Material of BBA – 12, Course of Vardhaman Mahaveer Open University, Kota) Unit Nine 'Small Business'*, pp. 128- 138, published by Vardhaman Mahaveer Open University Kota (April 2012) (ISBN 978-81-8496-319-9).
3. Upadhyaya, D. (2012), *Entrepreneurship and Small Business Management,(Study Material of MBA: MP 403, Course of Vardhaman Mahaveer Open University, Kota); Unit Five 'Small Scale Industries, pp62-75*, published by Vardhaman Mahaveer Open University Kota (September) (ISBN 13/ 978-81-8496-354-0).
4. Upadhyaya, D. (2012), *Entrepreneurship and Small Business Management,(Study Material of MBA: MP 403, Course of Vardhaman Mahaveer Open University, Kota); Unit Nine 'Institutional Support System, pp 117-130*, published by Vardhaman Mahaveer Open University Kota (September) (ISBN 13/ 978-81-8496-354-0).
5. Upadhyaya, D. (2012), *Entrepreneurship and Small Business Management,(Study Material of MBA, Course of Vardhaman Mahaveer Open University, Kota) unit Ten ' Institutional Support System'*, published by Vardhaman Mahaveer Open University Kota (2012) (ISBN 978-81-8496-319).

**Book Published**

1. Kumari Veena, Upadhyaya Deepika and Prasad Shiv; 'Women Empowerment and Development of Micro Finance: A Case study of Rajasthan (India)' (ISBN No. 978-3-659-20063-2) published in January 2012, by LAB Publishing House, Germany.
23. Details of Patents and Income Generated  
NA
24. Areas of Consultancy and Income Generated  
NA
25. Faculty Selected nationally/ Internationally to visit other laboratories/ institutions/ industries in India and Abroad
  - Dr Ashish Pareek had been selected as Associate Professor, Department of Marketing and Supply Chain Management, School of Business and Management Studies, Central University of Himachal Pradesh (Joined on lien and returned back)
  - Dr Shiv Prasad had been selected as Professor at Indira Gandhi Tribal National University, Amarkantak (Joined on lien and returned back)
  - Dr Manoj Kumar selected as Guest faculty at Institutes of International reputation such as - Shailesh J. Mehta School of Management, Indian Institute of Technology, Mumbai, Faculty Member at Nirma Institute of Management, Ahmedabad (Joined on lien and returned back).
26. Faculty Serving in
  - a) National Committees
  - b) International Committees
  - c) Editorial Boards
    - Prof Manoj Kumar
      - **Honorary Member**, Editorial Advisory Board, Journal of Management and Public Policy (Listed in EBSCO International Databases)
      - **Honorary Member**, Editorial Advisory Board, ACME Journal of Management, Ajmer
      - **Honorary Executive Committee Member**, International Research Journal for Intellectual Science and Management.
      - **Honorary Member**, Editorial Advisory Board, Journal of Psychology and Behavioral Research, SHAPES Society, New Delhi.
    - Prof Shiv Prasad
      - Member of Advisory Board of South Asian Journal of Commerce & Management, Varanasi.
      - Member of Advisory Board of Biannual referred International Journal ACME- Journal for Management Brilliance.
      - Executive Editor, International Journal of Management Excelencia, published by Department of Management Studies, M.D.S. University Ajmer.
    - Dr Ashish Pareek

**Editorship****Journals**

- Member, Editorial Board, **Entrepreneurship Business Review**, A bi-annual Journal of Center for Entrepreneurship and Small Business Management, MDS University, Ajmer since January 2011
- Member, Editorial Board, **Journal of Management Excellencia**, A Journal of Department of Management Studies, Maharshi Dayanand Saraswati University, Ajmer

- Member, Editorial Board, **South Asian Journal of Tourism and Heritage (SAJTH)** (International Referred Research Journal), Centre for Tourism and Heritage Research, Dayanand College, Ajmer.

**Reviewer**

- Reviewer for United States Association for Small Business and Entrepreneurship conference 2011 (USASBE 2011) organized at Hilton Head Island, South Carolina during January 13-16, 2011.

Dr Deepika Upadhyaya

**Editor :**

- Entrepreneurship Business Review since Jan 2011

d) Any Other (please specify)

- Dr Ashish Pareek Had been conferred "Fellow of Indian Commerce Association" in 65th All India Commerce Conference (November 2012) for the outstanding contribution in the field of Commerce and Management.

Membership in Advisory Boards:

Prof Manoj Kumar

- **Honorary Member**, Advisory Board, Institute of Entrepreneurship, Mumbai, INDIA; and
- **Member**, Advisory Council, Center for Entrepreneurship and Small Business Management, MDS University, Ajmer, INDIA.
- **Member**, Board of Studies, Institute of Rural Management, Jaipur, INDIA

27. Faculty recharging strategies (UGC, ASC, Refresher/ Orientation Programs, Workshops, Training Programs and similar)

Professor Manoj Kumar

- Invited by the TAPMI School of Business, Manipal University, Jaipur to attend the "Higher Education Leadership Meet 2015" on December 19, 2015
- Attended National Seminar "Marketing Summit" at Institute of Rural Management, Jaipur, January 30, 2015

Dr Ashish Pareek

- Attended Ivey IIMC Case Method Workshop. Participated in the Case Writing, Teaching and Research Workshop organized by Ivey Business School and Indian Institute of Management Calcutta Case Research Center (IIMCCRC) held during November 25-28, 2014 at Finance Laboratory, New Academic Block, Indian Institute of Management Calcutta.
- Attended **Pre-Conference Workshop on Metaphor Analysis and Ethnography Research** organized by Indian Institute of Management Lucknow (IIML) Noida Campus, Delhi NCR during January 8-9, 2014.
- Attended **Workshop on Algae Cultivation and Biofuel Production** organized by Algae Biofuel & Biomolecules Centre and UGC-Academic Staff College, Maharshi Dayanand Saraswati University, Ajmer during July 26-31, 2013.
- Attended three days **Case Method Teaching Seminar** organized by Harvard Business Publishing in collaboration with Case Research Society of India and hosted by Hindustan Unilever Limited at Unilever Indian Limited Headquarters at Mumbai during May 30 – June 01, 2013.

Dr. Deepika Upadhyaya

**Teaching Qualifications/ Trainings**

1. Participated in Faculty Development Programme on Entrepreneurship organised by

Entrepreneurship Development Institute (EDI) Ahmedabad, from Jan 31-Feb 11, 2011.

2. Attended Refresher course in Entrepreneurship at Academic Staff College, Maharshi Dayanand Saraswati University, Ajmer during July 11 – July 31, 2012

#### **Trainings/ Workshops attended**

3. Participated in 'NSS Refresher Course for Programme officers', sponsored by the Ministry of Youth Affairs and organized by Center for Management Studies, HCM Rajasthan State Institute of Public Administration, Jaipur, Rajasthan from Jan 18-22, 2010.
4. Participated in Workshop on Awareness Towards Women harassment at work Place, organized by Department of Population Studies, Maharshi Dayanand Saraswati University, Ajmer during March 15-16, 2013
5. Participated in Workshop on Algae Cultivation and Biofuel Production organized by Algae Biofuel & Biomolecules Centre and UGC-Academic Staff College, Maharshi Dayanand Saraswati University, Ajmer during July 26-31, 2013.
6. Participated in Ivey IIMC Case Method Workshop, organized by Ivey Business School and Indian Institute of Management Calcutta Case Research Center (IIMCCRC) at Finance Laboratory, New Academic Block, Indian Institute of Management Calcutta, during November 25-28, 2014.

#### 28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects
  - Prof Manoj Kumar: 20% of Dessertorial students guided at MBA Level
  - Prof Satish Agarwal: 20% of Dessertorial students guided at MBA Level
  - Prof Shiv Prasad: 20% of Dessertorial students guided at MBA Level
  - Dr Ashish Pareek: 20% of Dessertorial students guided at MBA Level
  - Dr Deepika Upadhyaya: 20% of Dessertorial students guided at MBA Level
- percentage of students doing projects in collaboration with other universities/ industry / institute  
None

#### 29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

#### 30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any. Organizer of Seminars/ Training Programs/ Workshops/ ESDPs

Prof Manoj Kumar

1. **Directed an ever time record of 16 (sixteen) Entrepreneurship and Skill Development Programs** - "One on *Landscape Designing*", "one on *Multimedia with Animation*", "Two on *Desk Top Publishing*", "Two on *Catering*", "One on *Web Designing*" "One on *Bakery Products*", "One on *Receptionist*", "One on *Cosmetology and Beautician*", "Two on *Computer Accounting with Tally*", "Four on *Fashion Designing*", at the Center for Entrepreneurship and Small Business Management, MDS University, Ajmer with all funding from the Indian Institute of Entrepreneurship, Regional Office, Dehradun. All these Programs were received very well and were aimed at creating self employment among the urban and rural youth in view of the severe unemployment problem in the society; All these programs were being organized during the year 2012-2013 under the leadership of Professor Manoj Kumar (The total Budget for these Programs was roughly of the tune of INR 27 Lacs);

2. Directed One 6 days Entrepreneurship Training Program delivered to Women and Child Development Department, Government of Rajasthan, being organized by the Center for Entrepreneurship and Small Business Management, M.D.S. University, Ajmer in 2012-2013;
3. Coordinator, 21 days University Grants Commission Sponsored Refresher Course for College Teachers on "*Entrepreneurship*", July 11, 2012 to July 31, 2012 at MDS University Ajmer;
4. Coordinator, Entrepreneurship Skills Development Program on "*Computer Accounting and Tally*", being organized by the Center for Entrepreneurship and Small Business Management, M.D.S. University, Ajmer (May-June 2012);
5. Coordinator, Entrepreneurship Skills Development Program on "*Multimedia and Animation*", being organized by the Center for Entrepreneurship and Small Business Management, M.D.S. University, Ajmer (May-June 2012);
6. Coordinator, Entrepreneurship Skills Development Program on "*Cosmetology and Beautician*", being organized by the Center for Entrepreneurship and Small Business Management, M.D.S. University, Ajmer (May-June 2012);
7. Coordinator, Entrepreneurship Skills Development Program on "*Receptionist and Guest Relations*", being organized by the Center for Entrepreneurship and Small Business Management, M.D.S. University, Ajmer (May-June 2012);
8. Coordinator, Entrepreneurship Skills Development Program on "*Landscape Designing*", being organized by the Center for Entrepreneurship and Small Business Management, M.D.S. University, Ajmer (May-June 2012);
9. Organized an Educational Seminar on "*Emerging Career Opportunities in Management*", at MDS University, Ajmer on June 15, 2012;
10. Organized a Series of Extension Lectures on "*Emotional Intelligence and Management*" at M.D.S. University, Ajmer on April 26, 2012;
11. Organized a Seminar on "*How to Succeed in Job Interviews*" for the students of M.D.S. University, Ajmer and also acted as main resource person on May 04, 2012;
12. Organized a Seminar on "*How to Enter into Group Discussions*" for the Students of M.D.S. University, Ajmer and also acted as main resource person on May 05, 2012;
13. Organized a Seminar on "*Reading Skills for Academic Success*" for the Students of M.D.S. University, Ajmer and also acted as main resource person on May 07, 2012;

#### Dr Ashish Pareek

1. Conference Secretary of 4<sup>th</sup> Biennial Center for ESBM International Conference on *Entrepreneurship, Tourism, Environment and Energy (ICETEE)*, at Center for Entrepreneurship and Small Business Management, Maharshi Dayanand Saraswati University, Ajmer during October 11-12, 2014.
2. Co-Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Multimedia and Web Page Designing (ESDP-MWPD) for Scheduled Caste (SC) students at Center for ESBM, MDS University, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of Micro, Small and Medium Enterprise, Government of India, New Delhi during March 28 – May 20, 2011.
3. Conference Secretary of 3<sup>rd</sup> Biennial Center for ESBM International Conference on *Entrepreneurship in Growing Economies*, at Center for Entrepreneurship and Small Business Management, Maharshi Dayanand Saraswati University, Ajmer during January 22-23, 2011.
4. Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Multimedia and Web Page Designing (ESDP-MWPD) at Aryan College, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of Micro, Small and Medium Enterprise, Government of India, New Delhi during November 25, 2010 to January 17, 2011.
5. Co-Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Multimedia and Web Page Designing (ESDP-MWPD) at Center for ESBM, MDS University, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of Micro, Small and Medium Enterprise, Government of India, New Delhi during November 22, 2010 to January 17, 2011.
6. Co- Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Fashion Designing (ESDP-FD) at Center for ESBM, MDS University, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of

Micro, Small and Medium Enterprise, Government of India, New Delhi during November 22, 2010 to January 17, 2011.

7. Co- Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Interior Designing (ESDP-FD) at Center for ESBM, MDS University, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of Micro, Small and Medium Enterprise, Government of India, New Delhi during November 22, 2010 to January 17, 2011.
8. Co- Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Fashion Designing (ESDP-FD) at Center for ESBM, MDS University, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of Micro, Small and Medium Enterprise, Government of India, New Delhi during September 1 to October 23, 2010.
9. Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Multimedia and Web Page Designing (ESDP-MWPD) at Center for ESBM, MDS University, Ajmer in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun with financial assistance from Ministry of Micro, Small and Medium Enterprise, Government of India, New Delhi during September 1 to October 23, 2010.
10. Co-coordinator and Member of the Examination Committee of First All India Commerce and Management Talent Search Examination – 2010 (AICMTSE 2010) conducted on August 8, 2010.

#### Dr Deepika Upadhyaya

1. Conference Secretary of 4<sup>th</sup> Biennial Center for ESBM International Conference on Entrepreneurship, Tourism, Environment and Energy (ICETEE), at Center for Entrepreneurship and Small Business Management, Maharshi Dayanand Saraswati University, Ajmer during October 11-12, 2014.
  2. Coordinator of 250 hours Entrepreneurship and Skill Development Programme – Computer Accounting with Tally, (ESDP-CA &T) Batch size 30, from April 24, 2012 to June 30, 2012. organized by Center for ESBM in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun
  3. Coordinator of 300 hours Entrepreneurship and Skill Development Programme – Web Designing (ESDP-WPD), Batch size 25, from April 24, 2012 to June 30, 2012. organized by Center for ESBM in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun
  4. Coordinator of 125 hours Entrepreneurship and Skill Development Programme – Fashion Designing (ESDP- FD), Batch size 25, at Center for ESBM, MDS University, Ajmer during September 24 to November 2, 2012. organized by Center for ESBM in collaboration with Indian Institute of Entrepreneurship Regional Office, Dehradun
  5. Co coordinator of 150 hours (1.5 months) Entrepreneurship and Skill Development Programme – Cosmetology & Beautician (ESDP- C&B) at Center for ESBM, MDS University, Ajmer during February 28, 2012 to March 31, 2012.
  6. Coordinator of 150 hours (1.5 months) Entrepreneurship and Skill Development Programme – Cosmetology & Beautician (ESDP- C&B) at Center for ESBM, MDS University, Ajmer during January 16, 2012 to February 29, 2012
  7. Co- Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Fashion Designing (ESDP-FD) for SC participants at Center for ESBM, MDS University, Ajmer during August 8, 2011 to October 14, 2011
  8. Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – ESDP on Fashion Designing (ESDP- FD) at Center for ESBM, MDS University, Ajmer during November 25, 2010 to January 17, 2011
  9. Conference Secretary of 3rd Biennial Center for ESBM International Conference on Entrepreneurship in Growing Economies, at Center for Entrepreneurship and Small Business Management (Center for ESBM), Maharshi Dayanand Saraswati University, Ajmer during January 22-23, 2011
  10. Co-Coordinator of 200 hours (2 months) Entrepreneurship and Skill Development Programme – Multimedia and Web Page Designing (ESDP-MWPD) at Center for ESBM, MDS University, Ajmer during September 1, 2010 to October 23, 2010
31. Code of ethics for research followed by the departments
  32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M B A Part I	61	38	22	RA	RA
M B A Part II	49	20	29	RA	RA
M B A (SM) Part II	12	05	07	RA	RA
Ph D Coursework	18	08	10	RA	RA

## 33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M B A Part I	71.66	18.33	10.00	--
M B A Part II	66.76	30.00	3.33	--
M B A (SM) Part II	58.33	33.33	8.33	--
Ph D Coursework	66.67	22.22	11.11	--

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.  
NA

## 35. Student progression

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
<input type="checkbox"/> Campus selection	30%
<input type="checkbox"/> Other than campus recruitment	80%
Entrepreneurs	

## 36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	
from other universities within the State	05
from universities from other States from	
Universities outside the country	

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period  
None (All are Ph D)

38. Present details of departmental infrastructural facilities with regard to

- |   |                        |
|---|------------------------|
| a) Library                                    | Departmental Library   |
| b) Internet facilities for staff and students | No                     |
| c) Total number of class rooms                | 02 and 01 Computer Lab |
| d) Class rooms with ICT facility              | None                   |
| e) Students' laboratories                     | None                   |
| f) Research laboratories                      | None                   |

39. List of doctoral, post-doctoral students and Research Associates

- from the host institution/university
- from other institutions/universities

40. Number of post graduate students getting financial assistance from the university.

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Through Board of Studies

42. Does the department obtain feedback from  
Yes Through Informal Means

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

For betterment of teaching learning processes

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes, for improvement

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

Yes, for improvement

43. List the distinguished alumni of the department (maximum 10)

S. No.	Name	Designation	Organisation	Location
1.	Ravi Dixit	Head , Market Insights	Google India	Delhi
2.	Nipun Jain	President, Retail Consumer Loans	Yes Bank	Mumbai
3.	Sanjiv Mehta	Vice President	Kotak Mahindra Bank Ltd.	Jaipur
4.	Manoj Nair	DGM, International Business	Borosil Glass Works Ltd.	Mumbai
5.	Meera Rastogi Mathur	Professor, Dept. of Management	Mohanlal Sukhadia Univetsity	Udaipur
6.	Adil Raihan	Executive Vice President	The Premier Bank Ltd.	Bangladesh
7.	Sudip Maiti	Vice President & Head, Sales	Infrastructure Services at Mindtree	Greater Chicago (USA)
8.	Surendra Yadav	Member Technical Staff (Performance Engineering)	Pay Pal	San Francisco Bay Area (USA)
9.	Naresh Goyal	Deputy General Manager	India Infrastructure	Delhi

			Finance Company Ltd.	
10.	Daryl D'souza	Business Head, Mortgages	Deutsche Bank	Mumbai

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

The Summary of 6 days Orientation cum induction program being conducted by the Department from September 01, 2014 to Sept 08, 2014 (six day program). In this Program a total of 12 outside Resource Persons of outstanding calibre were invited for sessions on different aspects of MBA Program and students development. The program was visualised, executed and evaluated by Professor Manoj Kumar, Head of the Department of Management with guidance and blessings from the Hon'ble Vice Chancellor. Each session was of 90 minutes duration.

<b>Date: Sept 01, 2014</b>	Dr Raghuvver Singh Director, TAPMI School of Management, Jaipur	Dr Karunesh Saxena, Professor and Director, Faculty of Management Studies, MLS University, Udaipur
Topic 1	1. Getting Started with MBA	1. Emotional Intelligence
Topic 2	2. What MBA Program does to the Students	2. Personal Effectiveness
<b>Date: Sept 02, 2014</b>	Dr Swapna Patavri, Associate Professor, Department of Management Studies, JNV University, Jodhpur	Sr Arvind Bhatt, Seasoned Freelancer cum Soft Skills trainer, Jodhpur
Topic 1	1. Leadership Styles	1. Management Development Lessons from Indian Scriptures
Topic 2	2. Corporate Leadership	2. Personality Development
<b>Date: Sept 03, 2014</b>	Mrs Madhu Murdiya, Associate Professor, Institute of Hotel Management, Pacific University, Udaipur	Mrs Pallavi Mehta, Associate Professor, Institute of Hotel Management, Pacific University, Udaipur
Topic 1	1. Creativity & Innovation	1. Positive Attitude
Topic 2	2. Entrepreneurship	2. Motivation in life
<b>Date: Sept 05, 2014</b>	Dr Rajesh Kothari, Professor Poddar Institute of Management, Jaipur	Sh A. Aditya, Management Expert, Jaipur
Topic 1	1. Career in Finance	1. Dimensions in Marketing
Topic 2	2. Lessons from Niagra Falls	2. Branding in Marketing
<b>Date: Sept 06, 2014</b>	Dr P.K. Jain, Professor, Faculty of Management Studies, MLS University, Udaipur	Dr Anil Kothari, Professor, Faculty of Management Studies, MLS University, Udaipur
Topic 1	1. Personality Development	1. Financial Decision Making
Topic 2	2. Group Dynamics	2. Investment outlook in India
<b>Date: Sept 08, 2014</b>	Sh R.L. Krishniya, Management Consultant cum Professional, Jaipur	Dr Manvinder Singh Pahwa, Associate Professor, TAPMI Manipal School of Management, Jaipur
Topic 1	1. Self Development	1. Dimensions of Leadership
Topic 2	2. Road Map for Future: Career Planning	2. Student Motivation

In the months of November and December 2015, 18 special lectures were conducted by outside resource persons/experts of repute in which 10 such experts delivered sessions to MBA students on personality development, presentation skills, facing job interviews, motivation, creativity, sensitivity training, body language, emotional intelligence, written and spoken English proficiency etc.

45. List the teaching methods adopted by the faculty for different programmes.  
Lecture method, case method, role playing, presentation, and group discussion
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
Through continuous evaluation like regular internal tests, quizzes and by conducting special lectures
47. Highlight the participation of students and faculty in extension activities.
48. Extension Lectures organised by

#### Professor Manoj Kumar

1. Guest Lecture at the UGC Human Resource Development Center of MDS University, Ajmer on the theme "*Communication Effectiveness for Teachers*" on December 01, 2015
2. Guest Lecture at the Pacific Institute of Hotel Management, PAHER, Pacific University, Udaipur on Sept 03, 2014 on "*How to be successful in Job Interviews*";
3. Guest Lecture at the University Business School, Punjab University, Chandigarh on August 12, 2014, on Effective Presentation Skills;
4. Guest Lecture at the University Grants Commission Academic Staff College at MDS University, Ajmer on "Effective Teaching Methods in Higher Education" on Dec 19, 2013;
5. Guest Lecture at SIBACA, Lonawala, India on "*Communication Skills for Teachers*" on March 04, 2013;
6. Guest Lecture at SIBACA, Lonawala, India on "*How to Handle a Case Class in Management Education*" on March 05, 2013;
7. Guest Lecture at SIBACA, Lonawala, India on "*Advanced Concepts in Media Buying*" on March 04, 2013;
8. Major Resource Person at the Academic Staff College, MDS University, Ajmer and delivered a lecture with the theme "*Communication Skills for Teachers*" on Jan 31, 2013;
9. Guest Lecture "*Succeeding in Job interviews*" at the Haryana School of Business, Guru Jambheshwar University, Hissar, Haryana, Jan 15, 2011;
10. Major Resource Person at the Academic Staff College, MDS University, Ajmer and delivered a lecture with the theme "*Communication Skills for Teachers*" in Sept 2010;
11. Major Resource Person at the Academic Staff College, MDS University, Ajmer and delivered a lecture with the theme "*Liberalization, Privatization and Globalization*" in September, 2010;
12. Resource person at the Apex Institute of Management and Science, Jaipur (INDIA) on "*Case Method in Management Education*", Aug 14, 2010;
13. Lecture at SIBACA, Lonawala on "*How to be successful in Job Interviews*" on Feb 13, 2010;
14. Major Resource Person at a National Workshop titled "Gateway to Ph.D." organized by SIMCA, Vadgaon, Pune with the topic "*Case Method of Research*" for Ph.D. scholars on Feb 11, 2010

#### Dr Ashish Pareek

##### Participation as Chairperson/ Resource Person

1. Delivered a Keynote address in inaugural session of National Conference "Entrepreneurship, Global Economy and Sustainable Development for Developing Nations" organised by Faculty of Commerce, Dayanand College, Ajmer during January 15-16, 2016.
2. Chaired One Technical Session in Two Day National Conference "Entrepreneurship, Global Economy and Sustainable Development for Developing Nations" organised by Faculty of Commerce, Dayanand College, Ajmer during January 15-16, 2016.
3. Women Engineering College, Ajmer October 14, 2015
4. Delivered a Keynote address in inaugural session of 1<sup>st</sup> National Seminar on Marketing organized on September 12, 2015 at Prestige Institute of Management, Gwalior.
5. Co-Chaired a Technical Session "Emerging trends and Challenges in Marketing" on February 27, 2015 in Two days UGC sponsored National Conference on "Emerging Trends & Challenges in Management" during 27-28 February 2015 organized by Department of Management Studies, Faculty of Commerce & Management Studies, Jai Narain Vyas University, Jodhpur

6. Resource Person for the ICSSR Sponsored Ten days Research Methodology Programme for Ph D Students in Social Sciences organised by Faculty of Education, Mohan Lal Sukhadia University, Udaipur during May 5-14, 2014. I engaged three sessions during May 12-13, 2014.
7. Chaired a Technical session on World Trade Organization (WTO)/ International Monetary Fund (IMF)/ World Bank (March 29, 2014) in ICSSR sponsored International Conference on "Global Business: Opportunities & Challenges" organized by Department of Commerce, Osmania University, Hyderabad in collaboration with APSCHE during March 27-29, 2014.
8. Resource Person for the ICSSR Sponsored Two Weeks National Workshop on Capacity Building Program for Faculty (CBPF) organised by Department of Marketing and Supply Chain Management, School of Business and Management Studies, Central University of Himachal Pradesh, Shahpur, Dharamshala, Kangra during December 9 – 22, 2013. I engaged three sessions during December 17-18, 2013.
9. Resource Person for the ICSSR Sponsored Training Course on Research Methodology for M. Phil./ Ph.D. Students in Social Science organised by Department of Political Science, Jai Narayan Vyas University, Jodhpur during September 28 – October 7, 2013. I engaged three sessions during October 3-4, 2013.
10. Delivered lecture on "Patents in Algae Cultivation: A review" to the participants of Workshop on Algae Cultivation and Biofuel Production organised by Algae Biofuel and Biomolecules Centre, Maharshi Dayanand Saraswati University, Ajmer on July 29, 2013.
11. Resource person for the conduct of a Case Writing Workshop at Jagran Institute of Communication and Management, Bhopal, February 17, 2013
12. Resource Person for the National Seminar on "Educational Reforms and Economic Development in 21st Century" being organized by Department of Economics, Shri Pragya Mahavidyalaya, Bijainagar during January 24-25, 2013.
13. Delivered lecture on "Behavioural Finance" to the participants of Refresher Course of Commerce at Academic Staff College, Maharshi Dayanand Saraswati University, Ajmer (in the capacity of Assistant Professor, Department of Management Studies, Maharshi Dayanand Saraswati University, Ajmer) on December 21, 2012.
14. Delivered lectures to the students of M Phil (E. A. F. M.) and M Com (Previous) during September 17 to 19, 2012 at Department of Commerce, Maharshi Dayanand Saraswati University, Ajmer (in the capacity of Associate Professor from Central University of Himachal Pradesh).
15. Delivered lectures on "Entrepreneurial Development" and "Role of Educator in Entrepreneurship Education" to the participants of Refresher Course of Entrepreneurship at Academic Staff College, Maharshi Dayanand Saraswati University, Ajmer (in the capacity of Associate Professor from Central University of Himachal Pradesh) on July 17, 2012.
16. Delivered a series of lectures to participants of Entrepreneurship cum Skill Development Programme (ESDP) on Multimedia and Animation and Computer and Tally during April 30 to May 02, 2012 at Center for Entrepreneurship and Small Business Management (Center for ESBM), Maharshi Dayanand Saraswati University, Ajmer (in the capacity of Associate Professor from Central University of Himachal Pradesh).
17. Contributed as resource person in Director's Conclave-2011 on "Tourism and Global Peace: Setting Agenda for future" organized by Indian Institute of Tourism and Travel Management, Gwalior in association with Kuoni Academy during December 24-25, 2011
18. Chaired a technical session "Emerging issues in Entrepreneurship" of the National Conference themed "Paradigm shift in Business Practices: Challenges and Perspectives" held at Department of Management Studies, Poornima Group of Colleges, Jaipur on March 26, 2011.
19. Delivered keynote address on 'Business Opportunity Scanning' at AICTE sponsored National Seminar on "Emerging Business Trends in India" organised during October 25-27, 2010 at Department of Management Studies, Swami Keshavanand Institute of Technology, Jaipur.

#### Dr Deepika Upadhyaya

1. Resource Person for four sessions in the centralized teaching for the Ph.D. Coursework of Paper I - "Research Methodology and Computer Application", students, held in M.D.S. University, Ajmer during January 2016
2. Chaired One Technical Session in Two Day National Conference "Entrepreneurship, Global Economy and Sustainable Development for Developing Nations" organised by Faculty of Commerce, Dayanand College, Ajmer during January 15-16, 2016.

3. Resource Person for six sessions in the centralized teaching for the Ph.D. Coursework of Paper I - "Research Methodology and Computer Application", for science students, held in M.D.S. University, Ajmer during December 2015
  4. Resource Person for a session on Data Collection on January 7, 2015, in the Research methodology workshop organised by Government College Beawer, during January 6-7, 2015.
  5. Resource Person for six sessions in the centralized teaching for the Ph.D. Coursework of Paper I - "Research Methodology and Computer Application", held in M.D.S. University, Ajmer during 12<sup>th</sup> to 30<sup>th</sup> September 2014.
  6. Resource Person for three sessions during May 12-13, 2014, in the ICSSR Sponsored Training Course on Research Methodology for M. Phil./ Ph.D. Students in Social Science organised by Faculty of Education, MLS University, Udaipur, during May 5- May 14, 2014.
  7. Delivered lecture on "Patents in Biofuel Production: Current Status and Future Prospects", in the Workshop on Algae Cultivation and Biofuel Production organised by Algae Biofuel and Biomolecules Centre, Maharshi Dayanand Saraswati University, Ajmer on July 29, 2013.
  8. Resource person in Case Writing Workshop at Jagran Institute of Communication and Management, Bhopal, February 17, 2013
  9. Resource person in Refresher course in Commerce held from December 3, 2012 to December 23, 2012, organized by the Academic Staff College, M.D.S. University and delivered two lectures on: Measurement and Scaling Techniques and Conducting Survey:
  10. Delivered lecture on "Career Opportunities in Commerce", as a resource person in a One Day seminar, organised by Faculty of Commerce, Dayanand College, Ajmer on September 10, 2012.
48. Give details of "beyond syllabus scholarly activities" of the department.  
Yes, in 2012 the Department conducted several academic workshops for the personality Development of University Students on themes such as – How to face job interviews successfully, how to enter into group discussions, emotional intelligence, stress management and conducted one seminar on Emerging Career Opportunities in Management by inviting several leading academic experts from Punjab University, Chandigarh, Poddar Institute of Management, Jaipur etc.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.  
No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.  
Through Ph.D. Program and publications by Faculty Members
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.  
Strengths
1. Government aided program,
  2. The credibility of the MBA Programs is quite high evidenced by the Continuous track record of the Department in filling all 60 MBA Seats under environmental turbulence at both National and International levels
  3. One of the largest Departments in terms of Regular Faculty Members, All Five Faculty members are educated and trained from reputed Institutes in the Country; All are Ph.D.s; Four trained intensively for four months FDP at Indian Institute of Management, Ahmedabad and one M.Phil. from FMS, Delhi
  4. The MBA Program is now 22 year old and matured
  5. A body of 1200 plus Alumni who have passed out from FMS Ajmer as a major support, guidance base

### **Opportunities Facing the Department of Management Studies:**

1. Due to the all round economic and industrial recovery in India and elsewhere, the prospects of MBA Program are very good, possibly leading to better chances of attracting good students and faculty
2. A dedicated Freight Industrial Corridor is going to be developed soon from Mumbai to Delhi and it will pass through Ajmer which is likely to greatly increase the Industrial and Economic activities in Ajmer Region and possibility for More academic programs in Management, Training programs, extension activities, research initiatives, curriculum design initiatives, short term certificate/Diploma Programs

### **Serious Challenges and Weaknesses facing the Department of Management Studies**

In view of the huge Strengths and Opportunities facing the Department, the real Challenge before the Department is to be able to meet the following major Weaknesses which are not under the Control of Academic Leadership of Head, Department of Management Studies and or under the control of Dean, Faculty of Management Studies namely:

1. While Two Post graduate Programs are being run by the Department namely Master of Business Administration (Govt aided) and Master of Business Administration (Services Management, self financed) ONLY TWO CLASS ROOMS ARE AVAILABLE, THERE ARE NO SEPARATE ROOMS FOR SMALL GROUP DISCUSSION IN KEEPING WITH THE PROFESSIONAL NATURE OF THE TWO PROGRAMS
2. THERE IS NO SEPARATE SPACE/ ROOM FOR DEPARTMENTAL LIBRARY Which is a must for Professional Programs as elsewhere.
3. THERE IS NO SEPARATE SPACE/ ROOM FOR THE SEMINAR HALL where all the students of the Department can be seated for attending to external guest lecture/seminar/workshop/special lectures as elsewhere.
4. THERE IS NO PROPER ROOM FOR THE STUDENT COMPUTER LABORATORY as at present all the computers (about 55 are barely placed huddled in a small corner room creating their operational and maintenance difficulties, and for the same reason the computer laboratory is either unutilised or grossly underutilized).
5. THERE IS ONLY ONE CLERK IN THE DEPARTMENT AND UNFORTUNATELY HE DOES NOT KNOW HOW TO OPERATE COMPUTER OR PERIPHERALS, there is no Steno, no Office Assistant, no Section Officer in the Department, there is no Computer Operator who can look after the computer laboratory, there is no Librarian, Assistant Librarian, no dedicated library staff to manage about 800 books of the Department or reading section, so no expansion of Library feasible in Future

### **SPECIAL NOTE:**

The UGC had earmarked and given Rs 30 lacks to this University and this University had earmarked Rs 85 lacks out of the savings of the Department of Management Studies for the separate and Dedicated Building of the Department of Management Studies, it was to be a Two Floor Building – a ground floor and a first floor with adequate provisions for MBA Class rooms, syndicated small rooms for small room discussion groups meetings, dedicated rooms for Library, Seminar rooms, Computer rooms, adequate faculty member chambers, students common room, reading rooms, Room even for Personal Assistant to the Director/Head but the University has **mis-appropriated** the space meant for the Department of Management Studies with very serious negative implications for the healthy sustenance and growth of the Department as follows:

1. Only 50% of the ground floor space has been given to the Department of Management Studies; rest 50% space on the ground floor has been given to the Department of Commerce since the last 12 years; and

2. On the first Floor and Second Floor space has been given to the Central Government Agency for the Project on Entrepreneurship Development, unfortunately which has been converted into a degree imparting Department (running three parallel MBA Programs) against its stipulated and sacred objective of inculcating and promoting entrepreneurship. The faculty resources of Department of Management have been diverted to manage the parallel MBA Programs to the serious detriment of the interests of the Department of Management Studies.
  3. This way the Department of Management Studies for which the UGC and the University had committed dedicated building, only 8% space has been given to this Regular, 22 year old Department, that has the highest number of Regular Faculty Members IN THIS WHOLE University (FIVE) in the back drop of only 18 Faculty members in the whole University.
52. Future plans of the department.  
Unless the above mentioned very serious infrastructural, staff bottle necks are sorted out by the University Administration no further initiatives are feasible to be planned at all.

# FACULTY OF SCIENCE

**BOTANY**  
**COMPUTER SCIENCE**  
**ENVIRONMENTAL SCIENCE**  
**FOOD SCIENCE & NUTRITION**  
**MICROBIOLOGY**  
**PURE & APPLIED CHEMISTRY**  
**REMOTE SENSING & GEOINFORMATICS**  
**ZOOLOGY**



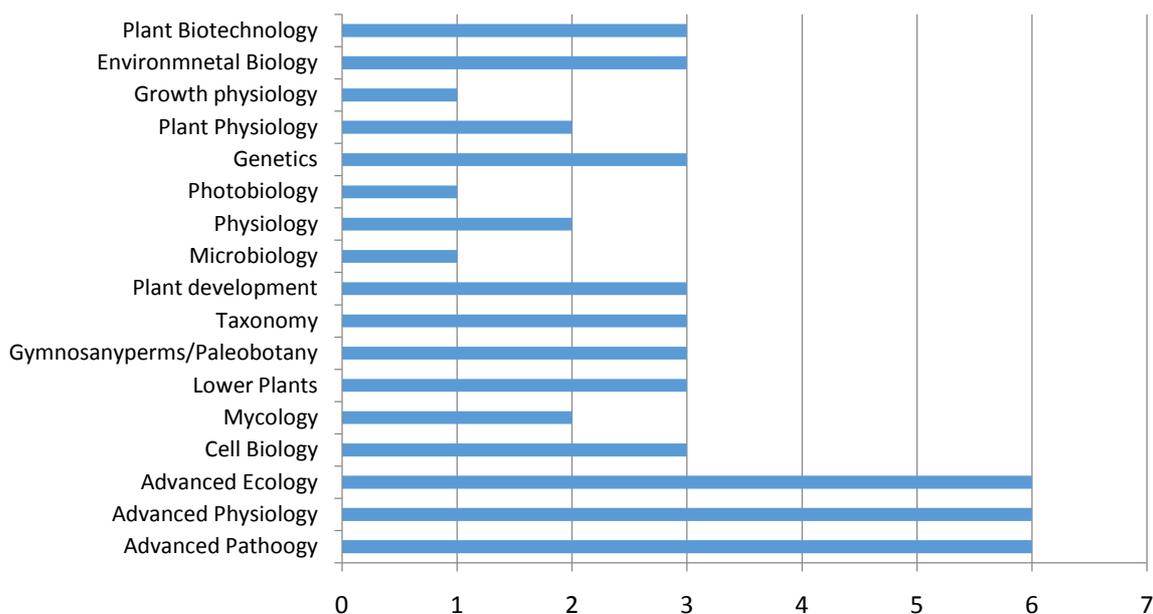
**MAHARSHI DAYANAND SARASWATI**  
**UNIVERSITY**

**AJMER**

**वनस्पति विज्ञान  
विभाग  
DEPARTMENT  
OF  
BOTANY**

1. Name of the Department : Department of Botany
2. Year of establishment: March 1990
3. Is the Department part of a School/Faculty of the university?: School of Life Sciences; Faculty of Science
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
  - M.Sc. Botany
  - M.Phil. Botany\*
  - Ph.D. Botany\*
 \*Discontinued
5. Interdisciplinary programmes and departments involved  
 Department is involved in teaching some topics/delivering lectures in other departments as mentioned below:
  - Environmental Science: Ecology, Ecosystem analysis, Population competition Models, Plant Diversity: Biodiversity global patterns, Conservation methods, Forest ecosystem: Forest types and dynamics, Climate Change and Global warming with reference to arid and semi arid regions.
  - Microbiology: Environmental biotechnology, GEMs in Environment
  - Foods & Nutrition Science: Nutritive value of wild plants
  - Economics: Ecological economics, natural resources and economic, Economics-environment-society linkages.

The syllabus of M.Sc. Botany has been designed to incorporate the core areas of the subject as well as advanced papers along with emerging areas:



6. Courses in collaboration with other universities, industries, foreign institutions, etc.  
 The Department has no collaboration in teaching of courses of other universities/industries/institutions.

7. Details of programmes discontinued, if any, with reasons.  
The M.Phil. and Ph.D. programmes have been discontinued because of following reasons:

#### **M.Phil. Programme:**

M.Phil. programme was discontinued because in 2002 department started M.Sc. classes and due to scarcity of eligible teachers for M.Phil. programme, it was discontinued. For running M.Phil. programme, at least three teachers with Ph.D. degree are required. Also the students were more interested for Ph.D. directly after passing M.Sc. than M.Phil. programme.

#### **Ph.D. Programme:**

During the last five years the department could not register Ph.D. scholars because of unavailability of supervisors in the department. However, Ph.D. programme was continued till 2009 and since inception of the department its 3 faculty members produced 37 Ph.D.s before their superannuation/leaving the department.

S. No.	Name of Faculty	Stay in Department		Total stay (Years)	Total no. of Ph.D. s
		From	To		
1	Prof T.N. Bhardwaj	1990	1991*	01	01
2	Prof. S.K. Mahna	1990	2009**	20	18
3	Prof KC Sharma	1990	1998***	09	18

\*Appointed as Vice Chancellor of Kota Open University in 19

\*\*Superannuated

\*\*\*Appointed as Professor in Department of Environmental Science

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System  
M.Sc. Botany programme is also running in affiliated colleges of the university and the examination was conducted through annual system earlier. Now the university has started Semester system of examination from session 2015-16 in the campus as well as in affiliated colleges.

Choice Based Credit System (CBCS) is to be started form next academic session. The proposal is being submitted to Board of Studies for restructuring the syllabus for CBCS.

9. Participation of the department in the courses offered by other departments  
The curriculum is to be designed for the participation in interdepartmental choice of courses.

Under CBCS the department is planning to go for courses being offered by other departments. Such courses are under planning by the departments.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	1 (Now vacant)	-
Associate Professor	2	2 (Now vacant )	-
Asst. Professor	-	-	-

Others: Visiting Professor	-	1	-
Guest faculty (Lecture basis)		4	

At the time of establishment of the department in 1990, ONE Professor and TWO Associate Professors (Reader) were appointed in the department:

- Professor (Prof. T.N. Bhardwaja)– Left as he was appointed as Vice Chancellor in Kota Open University Kota in 1991
  - One Associate Professor (Dr. S.K. Mahna): was selected as Professor in 1997 and then he was superannuated in August 2009.
  - One Associated Professor (Dr. K.C. Sharma); was selected as Professor of Environmental Science in 1998, and then superannuated in 2010.
  - Further the vacancies could not be filled.
11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Faculty Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided during the last 4 Years
Prof. K.C. Sharma*	M.Sc., Ph.D.	Visiting Professor	Ecology	42	5**
Dr. G.G. Saini	M.Sc., Ph.D.	Visiting Faculty	Mycology	40	-
Dr. M.L. Verma	M.Sc., Ph.D.	Visiting faculty	Taxonomy	40	-
Dr. Ritu Sharma	M.Sc., Ph.D.	Guest faculty	Biotechnology	10	-
Mr. S.Veer Singh	M.Sc., NET, SET	Guest faculty	Taxonomy/ Ecology	6	-
Mr. Rahul Mourya	M.Sc., NET, SET	Guest faculty	Plant Pathology	2	-
Dr. (Mrs.) Poonam Mohan	M.Sc., Ph.D.	Guest faculty	Biochemistry	20	-

\*Research supervision for Ph.D. degree:

S. No	Name of Scholar	Title of Ph.D. Thesis	Year of award
1	Prabhu Dan Charan	Environmental analysis for some pesticides using Gas Chromatography and their effect on selected vegetable plants of Ajmer	2011
2	Jitendra K. Yadav	Environmental Conservation in Cement Industries through Clean Development Mechanism (CDM)	2011
3	Vijay Kumar Meena	Studies on the Ecology and Ethno-medicinal plants of Bari area of Dang Region, Rajasthan	2014
4	Mudita Nag	Studies on the impact of nutrient loading and bioorganic compounds in microcosm with special reference to lake Anasagar of Ajmer (Rajasthan)	2014
5	Ruchira Bhardwaj	Climate Change and present status of biodiversity: A study of the landscape patterns in central Aravalli region of Rajasthan	2015

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors :  
Prof. K.C. Sharma appointed as Visiting Professor on 1.12.2015
13. Percentage of classes taken by temporary faculty – programme-wise information
- 75 % classes are taken by Guest faculty
  - 25% classes are taken by the Visiting professor
14. Programme-wise Student Teacher Ratio
- 10:1 (Student: Guest faculty)
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

S. No.	Staff	Sanctioned	Filled
1	Technical Staff	1	1
2	Administrative Staff	1	1
3	Fourth Class	1	1

16. Research thrust areas as recognized by major funding agencies
- Biology of Pteridophytes
  - Mutagenesis *In vivo* cultures and *Rhizobium*-biology
  - Ecology of Aravallies
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

There is no permanent faculty in the department, therefore, ongoing projects are not being carried out in the department. However, before 2009, projects from funding agencies like CSIR, was completed by one faculty member of the department. Prof. S.K. Mahna was also a co-participant in an International project sanctioned by European commission 'INCO-DEV' with other partners Phillips Universitat, Marburg, Germany, CSIC, Granada, Spain and Tribhuwan University, Kathmandu, Nepal.

18. Inter-institutional collaborative projects and associated grants received
- a) National collaboration no
- b) International collaboration

National Collaboration;

International Collaboration with Phillips Universitat, Marburg, Germany, CSIC, Granada, Spain and Tribhuwan University, Kathmandu, Nepal, in a project 'Soyabean BNF and mycorrhization for improved in south Asia'.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.
20. Research facility / centre with
- state recognition
  - national recognition
  - international recognition

Research facilities were created since inception of the department in 1990. An international

project was sanctioned to Prof SK Mahna by European Commission on Soya bean crop of Kota Region. During this project a Tissue culture laboratory was established with necessary infrastructure. Facilities for research work pertaining to analysis of plant tissues, soil and water are also available in the department.

21. Special research laboratories sponsored by / created by industry or corporate bodies
22. Publications:
  - \* Number of papers published in peer reviewed journals (national / international)
  - \* Monographs
  - \* Chapters in Books
  - \* Edited Books
  - \* Books with ISBN with details of publishers
  - \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
  - \* Citation Index – range / average
  - \* SNIP
  - \* SJR
  - \* Impact Factor – range / average
  - \* h-index
23. Details of patents and income generated
  - Not generated
24. Areas of consultancy and income generated
  - Not generated
25. Faculty selected nationally/internationally to visit other laboratories/institutions /industries in India and abroad: Not during the last five years.
26. Faculty serving in
  - a) National committees
  - b) International committees
  - c) Editorial Boards
  - d) any other (please specify).
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).
  - Not applicable.
28. Student projects
  - percentage of students who have done in-house projects including inter-departmental projects
  - percentage of students doing projects in collaboration with other universities/industry / institute
29. Awards/recognitions received at the national and international level by
  - Faculty
  - Doctoral / Postdoctoral fellows

- Students

No permanent teacher was present in the department.

30. Seminars/ Conferences/Workshops organized and the source of funding (national /international) with details of outstanding participants, if any.

Could not organized due to unavailability of teachers.

31. Code of ethics for research followed by the departments.  
The code of conduct in research was followed by the department. Research supervisors ensure the originality of the work carried out by the scholars. Since adoption of UGC Minimum Standards for Ph.D. 2009, students are required to submit the soft copy of thesis for checking of plagiarism.

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4) <b>M.Sc. Botany</b>	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2010-11	169	08	21	100%	100%
2011-12	092	09	11	100%	100%
2012-13	088	13	09	100%	100%
2013-14	059	08	17	100%	100%
2014-15	098	09	11	100%	100%
2015-16	136	04	27	awaited	awaited

33. Diversity of Students

Name of the Programme (refer to question no. 4) M.Sc. Botany	% of students from the same university	% of students from other universities within the State	% of students From universities outside the State	% of Students from Other countries
2010-11	07	22	Nil	Nil
2011-12	08	12	Nil	Nil
2012-13	04	18	Nil	Nil
2013-14	09	16	Nil	Nil
2014-15	02	18	Nil	Nil
2015-16	08	23	Nil	Nil

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise\*.

S. No.	Name of Student	Year	Exam Cleared
1	Ramavtar Gour	2012	RAS, PTET
2	Mohan Lal Pormoya	2009	SET
3	Sharwan Kumar	2011	SET, PTET
4	Rajesh Gehlot	2011	NET, PTET
5	Ashok Mahela	2011	SET, PTET

6	Om Prakash	2011	SET, PTET
7	Sumer Saini	2011	SET, PTET
8	Banarasi	2011	SET, PTET
9	Mohammed Fahrook	2011	NET, RAS
10	Nandu Rathor	2006	PTET
11	Poonam Chand Tak	2006	PTET
12	Anshul Sharma	2010	PTET
13	Lokesh Jatav	2010	PTET
14	Lokesh Rulania	2010	PTET
15	Manohari Devi	2010	PTET
16	Om Prakash Yadav	2010	PTET
17	Shankar Lal Regar	2010	PTET
18	Ygendra Kumar	2011	CRPF-SI
19	Ramesh Suthar	2011	PTET
20	Rahul Meena	2011	PTET
21	Anita khichad	2012	PTET
22	Askok Sharma	2012	PTET
23	Chetan Prajapat	2012	PTET
24	Mukesh Kumar	2012	PTET
25	Amita Kumari	2012	PTET
26	Santosh Dudi	2012	PTET
27	Priya Singh	2013	CTET,KVS
28	Suman Lara	2013	RET
29	Ranjeet Singh	2013	RET
30	Manju Mahala	2014	RET

\*Based on available information only.

### 35. Student progression

Student progression	Percentage against enrolled
UG to PG	-----
PG to M.Phil.	-----
PG to Ph.D.	10%
Ph.D. to Post-Doctoral	2%
Employed	
<input type="checkbox"/> Campus selection	—
<input type="checkbox"/> Other than campus recruitment	70%
Entrepreneurs	10%

### 36. Diversity of staff: No permanent faculty

### 37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

One founder faculty of the department, Prof T. N. Bhardwaja after his superannuation got D.Sc. from the University of Rajasthan.

### 38. Present details of departmental infrastructural facilities with regard to

- Library
- Internet facilities for staff and students
- Total number of class rooms
- Class rooms with ICT facility
- Students' laboratories

## f) Research laboratories

The department has good facility for both postgraduate and research students. It was established in March 1990, and following programmes were initiated initially:

- o M.Phil. Botany
- o Ph.D. Botany

As such the research facilities were created since the inception of the department.

Later on as per the need and specialization of the faculty, following diploma courses were open in 1993:

- o PG Diploma in Environmental Technology
- o PG Diploma in Microbiology

After establishment of Department of Environmental Science, the then School of Population, Resources, environment and Development (SPREAD), and Department of Microbiology in the university, these two diploma were discontinued from the department.

Later on in 2002, M.Sc. Botany was started in the department.

Infrastructure	Number
Departmental library	-
Internal Facility	-
Total Class rooms	Three
Classroom with ICT	-
Students Laboratories	Two
Research Laboratories	Two
Stores	One
Seminar Hall	One
HOD chamber	One
Departmental Office	One

## 39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university
- b) from other institutions/universities

## 40. Number of post graduate students getting financial assistance from the university.

Topper of each Post Graduate class get financial assistance Rs 3000/- p.a. from the university.

## 41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

The department has restructured the syllabi of M.Sc. Botany in Semester pattern recently. The members of Board of Studies were informed in advance so that they can discuss the new pattern with the departmental colleagues. In the meeting of BOS, the syllabus is discussed at length. The model syllabus of UGC and of NET examination is also kept in mind while finalizing the PG syllabus. A tentative framework is prepared in the meeting which is finalized in the subsequent meeting.

The new syllabus is kept before the Academic Council of the university for approval.

## 42. Does the department obtain feedback from

- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the

department utilize the feedback?

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

Feedback from teachers is taken informally. The teachers of affiliated colleges send give their feedback on curriculum to the members of Board of Studies which is taken into consideration at the time of meeting.

Feedback on staff and teaching-learning has also been started through academic audit of the department. A 'Suggestion Box' has been installed in the department to know about students feedback on academic issues. The suggestions received from students and stakeholders are placed before the faculty and processed accordingly.

43. List the distinguished alumni of the department (maximum 10)

The department has produced doctoral students who are working in India and abroad in different spheres. Most of the alumni are in either in teaching or in research field as listed below:

1. Dr. Ram Singh, Asst Director, Medical Genetic Program, Columbia University, USA
2. Dr. Vertika Mohabia, Scientist, Medical Genetic Program, Columbia University, USA
3. Dr. Sriman Lal Meena, Dy Director, Botanical Survey of India, Jodhpur
4. Dr. Mukesh K. Meghwanshi, DRDO, Research Scientists, Asam
5. Dr. Beena Sharma, Scientist B, State Department of Science & Technology, Raipur, Chhatisgarh
6. Dr. Dharmesh Harwani, Assitt Professor, MGS University Bikaner
7. Dr. Pooja Gehlot, Asstt Professor, JN Vyas University, Jodhpur
8. Dr. Meenu Mathur, Lecture, SPRC Government College, Ajmer
9. Dr. Tahira Begum, Lecture, SPRC Government College, Ajmer
10. Dr. Rashmi Gupta, Lecture, SPRC Government College, Ajmer
11. Dr. Girish Raisinghani, Lecture, SPRC Government College, Ajmer
12. Dr. Renu Sharma, Lecture, SPRC Government College, Ajmer
13. Dr. Suman Tripathi, Lecture, Dungar, Government College, Bikaner
14. Dr. Syed Farook Ali, Rajasthan Administrative Services.
15. Dr. Manoj Kumar Rawat, Lecturer, Government college Bundi
16. Dr. Veenu Agarwal, Lecture, Government College, Nasirabad

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

45. List the teaching methods adopted by the faculty for different programmes.

The faculty members follow the following teaching methods in M.Sc. programme:

- Lectures with traditional methods- Chalk and Board
- Through PowerPoint Presentations
- Seminars before all faculty and students
- Project assignments
- Field trips
- Organizing Quiz competitions

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

An informal feedback is taken from students and difficulties are solved accordingly.

47. Highlight the participation of students and faculty in extension activities.

The students are the volunteers of NSS Unit of the university and taking part in various activities like;

- Clean campaign in University
- Rural development programme at Mohami
- Blood donation camps held in the university
- Environmental awareness campaign
- Plantation activities in the campus.

48. Give details of “beyond syllabus scholarly activities” of the department.

The students are trained in working of instruments of research labs. An emphasis is given for the following:

- General knowledge: Apart from the syllabus, students are supposed to know about general botany/plants their importance in mitigating environmental pollution and related issues.
- Communication skills: The students are encouraged to enhance communication skills. Weekly seminars are conducted.
- Use of ICT: Most of the students are from rural background and they don't know basis of computer operating. They are encouraged to learn about computers particularly MS Office. Student Groups constituted for learning of computer every day after completion of schedule classes.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Programme of the department has not been accredited as an individual unit

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Though there is no research activity in the department, but the faculty was engaged in advanced research and made significant in varied aspects of plant science. Their contributions are on the following aspects:

- Isolation of microbial strains for increasing production
- Documentation of ethno-medicinal plants of Aravalli region.
- Biodiversity assessment of Rajasthan
- Threatened species of Pteridophytes of Rajasthan
- Survey of ground water and distribution of fluoride and health hazards.

The department has organized special lectures of plant scientists. The lectures of following botanists were organized:

- Dr. Rajech Kumar, Principal Dayanand College Ajmer

- Dr. Pawan Kumar Dadhich, Central University of Rajasthan
- Dr. C.B. Gena Vice chancellor, MGS University, Bikaner
- Prof. N.C. Aery, MLS University, Udaipur
- Prof. S.K. Mahna, Rtd from MDS University, Ajmer

Besides, to develop interest in plant surveys among students following local educational trips were conducted by the department:

- National Seed and Spices Research Centre, Ajmer
- Agriculture Farm, Tabili
- Badi Valley –Ecotone region of Aravallis
- Pushkar and Pachkund Aravallis
- Ajmer district Forest Nursery, Ghoogra, Ajmer
- Bal Prakash Ashram at Badgaon
- Budha Pushkar lake

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

#### **Strength:**

- **Space:** The department has enough space which includes classrooms, laboratories, seminar hall etc.
- **Infrastructure:** Basic instruments and other facilities are available for research. The department was established in 1990 with three faculty who were involved in research. The department had a research project in collaboration with other countries- Germany, Spain and Nepal.
- **Location:** The university is located in Central Aravalli range which an ecotone between arid and agro-climatic region and represents rich plant diversity. Therefore, the region is most suited for botanical surveys and research.
- **Feeding institutions:** There are >250 affiliated colleges with the university, so the department gets good number of candidates seeking admission to PG programme.

#### **Weaknesses:**

- **Faculty crisis:** There is no permanent faculty in the department since 2009. Therefore, the teaching workload is shared by ad-hoc/guest faculty/visiting faculty/retired teachers only. Therefore, department can't enrol research students for Ph.D. degree. Consequently, there is no output related to publication and research projects.
- **Lack of research:** As mentioned research and other academic activities can't be taken without permanent faculty.
- **Students Intake:** Majority of students admitted to PG classes are coming from rural background and from colleges having inadequate laboratory infrastructure.

#### **Opportunities:**

- The department can be a prominent PG and research department in the state of Rajasthan. It caters needs of researchers of affiliated colleges.
- Looking to the location, the department can be developed as a Centre of Bio-resources, particularly for medicinal plants.
- The department can enter in MoUs/collaborations with research organizations/Universities/industries.

#### **Challenges:**

- **Faculty:** As per the UGC norms, at least 6 teachers are required for a department offering M.Sc. programme. Looking to the choice of students, there must be different specializations

which require additional faculty members.

- **Rejuvenation of research:** The department also require funding to create hi-tech infrastructure for research.
- **Collaborations:** To have collaborations with industries, forest Department and Research Institutes for exposure to students.
- **Placements:** Most of the students go for teaching jobs in schools. However, placements of students in food industries, research organizations is to be made through additional training.

52. Future plans of the department.

After appointment of permanent faculty in the department, the department will work:

- To restart Ph.D. programme
- To establish a centre for Germplasm conservation of threatened plants of Rajasthan
- To establish Bio-resource Centre and biodiversity Park in the university
- To start a course on Medicinal Botany or module courses for CBCS.
- To develop collaborations with organizations particularly with pharmaceutical companies for research on desired plant species.

## Brief Academic Profile of Faculty (Prof KC Sharma Visiting Professor) Publications (2010 onwards with Students and Collaborative Partners)

1. Pechlivanidis, I.G., Olsson, J., Bosshard, T., Sharma, D. and **Sharma K.C.** (2016). Multi-Basin Modelling of Future Hydrological Fluxes in the Indian Subcontinent. *Water* 8: (Accepted).
2. **Sharma K.C.**, Ruchira Bhardwaj and P.D. Charan (2016). Climatic Variability and Changing Trends of Plant Diversity at Landscapes of Central Aravalli Region of Rajasthan. (In Press)
3. Sharma Garima and **Sharma K.C.** (2016). Estimation of carbon sequestration potential of vegetation under different land use pattern of Pushkar Region of Rajasthan, *International Research Journal of Environmental Sciences*, ISCA-IRJEVS-2015-25.
4. Pechlivanidis I.G., Olsson J., Sharma D., Bosshard T. and **Sharma K.C.** (2015), Assessment of the climate change impacts on the water resources of the Luni region, India, *Global NEST Journal*, **17**(1), 29-40.
5. Kaushik G. and **Sharma K.C.** (2015), Climate Change and Rural Livelihoods-adaptation and vulnerability in Rajasthan, *Global NEST Journal*, **17**(1), 41-49.
6. Roy P.S., et al. (**Sharma K.C.**). (2015). New vegetation type map of India prepared using satellite remote sensing: Comparison with global vegetation maps and utilities. *International Journal of Applied Earth Observation and Geoinformation*. Elsevier 39 (2015) 142–159.
7. Charan P D and **Sharma K.C.** (2015). Medicinal Flora of the Thar Desert of Rajasthan : Therapeutic and Antimicrobial Importance. In *Microbes in Action*, Joginder Singh and Praveen Gehlot (Eds) . Agrobios (India) pp. 398-412.
8. Bhat A.H. and **Sharma K.C.** (2015). Physico-Chemical Analysis of groundwater quality of Adjoining areas of Sambhar Lake, a Ramsar Wetland of Rajasthan, India, *Current World Environment* (In Press)
9. Bhat A.H. and **Sharma K.C.** (2015). Health Related Problems of Salt workers at Sambhar Lake (Ramsar site) of Rajasthan, India. *Indian Journal of Health and Wellbeing*. (In Press).
10. Bhat A.H., **Sharma K.C.** and U.J. Bandy. (2015). Impact of Climatic Variability on Salt Production in Sambhar Lake, a Ramsar Wetland of Rajasthan, India *Middle-East Journal of Scientific Research* 23 (9): 2060-2065.
11. **Sharma K.C.**, Ruchira Bhardwaj and P.D. Charan (2015). Climatic Variability and Changing Trends of Plant Diversity at Landscapes of Central Aravalli Region of Rajasthan (In Press)
12. Sen A. et al. (**Sharma K.C.**). (2014). Atmospheric Fine and Coarse Mode Aerosols at Different Environments of India and the Bay of Bengal During Winter-2014: Implications of a Coordinated Campaign. *M-APAN-Journal of Metrology Society of India*. 29 (4):273–284.
13. Bhat A.H, Shriparna Saxena. and **Sharma K.C.** (2014). Assessment of Physico-Chemical characteristics of Surface and Bottom Strata of Upper Lake Bhopal. *Bioscience Guardian*, 4(1), pp23-29.
14. Reddy, C.S., Meena, S.L., Harikrishna, P., Prabhu, D.C. & **Sharma, K.C.** (2012). Conservation Threat Assessment of *Commiphora wightii* (Arn.) Bhandari- An economically Important Species. *Taiwania* 57(3):288-293.
15. Reddy, C.S., Harikrishna, P., Meena, S.L., Ruchira, B. & **Sharma, K.C.** (2011). Composition of Life forms and Biological spectrum along Climatic gradient in Rajasthan, India *International Journal of Environmental Sciences*. 1( 7). pp 1632-1639 \Bhardwaj, R., Dutta, S. and **Sharma, K.C.** 2011. Conserving Biodiversity of Medicinal Plants from Central Aravallis of Rajasthan, India. *Journal of Environmental Research and Development*. Vol. 6 (1) pp 69- 75.
16. Prabhu Dan Charan, Renu Sharma and **Sharma K.C.** (2010) 'Gas Chromatographic Analysis Of Organochlorine Pesticides In Lake Anasagar Of Ajmer, Rajasthan (India). *Journal of Environmental Science & Engineering*. 52 (1): 37-40.
17. **Sharma K.C.**, Charan P.D. and Nag Mudita (2010). An Integrated Restoration Plan for Lake Anasagar: A Threatened Water Body of Ajmer, Rajasthan, India. Proceedings of *International Conference on Lakes, 2010*, Wuhan, China.

### Research Project Completed:

Impact of Climate Change on Luni Basin of Rajasthan using CORDEX data Asian Domain. Funded by Swedish International Development Agency (Sida) Sweden in collaboration of with Swedish

Meteorological and Hydrological Institute (SMHI), Sweden (Indian Partners D. Sharma & K. C. Sharma from Central University of Rajasthan). Total Layout of Project Rs. 1.6 Crores.

**Current Edited Book Under Publication:**

D. Sharma and **Sharma K.C.** (2016): Climate Change and Environment: New India Publishing Agency, New Delhi.

**Research Supervision:** 33 Scholars awarded Ph.D. degree and two are working presently.

**Fellow Academic Societies:**

- **Fellow**, Indian Association of Environmental Management
- **Fellow**, Indian Institute of Ecology
- **Fellow**, International Society of Environmental Sciences

**Reviewer** of Indian and International Journals of Ecology and Environment including: Pregmon, Elsevier, Springer, The Water, Bulletin of Environmental Contamination and Toxicology.

**Conferences/Workshops/Seminars participated (2011 onwards)**

- Workshop on "Harnessing of Climate-Water-Energy Nexus for resource security in the Ganga River Basin" collaboration of Asia Pacific Network (Global Change Research), JNU, CURAJ, Institute for Global Environmental strategies, Held at Jawaharlal Nehru University, New Delhi. 20th April 2015.
- "Developing an operational water security index, and demonstrating its application in diverse regions of Asia" Collaborations of Central university of Rajasthan & MNIT, Jaipur by APN, AIT, Thailand, 10th March 2015.
- Resource person in National Seminar on Current Trends in Environmental Research (NSCTER-2015). Lecture on Ecological services: Impact of Climate Change with reference to Arid and Semi- arid regions of Rajasthan. MGS University Bikaner 28Feb-March 2, 2015.
- Resource Person in workshop of National Scientific Terminology Commission held at Government College Ajmer 29 Sept, 2015. Delivered lecture on Ecological Services of Forests in context to Climate Change. Commission on Scientific Terminology, New Delhi. 29 Sep 2015.
- National Workshop on Ecological Services of River Ganga - NEI and WWF held on 15-16 July 2014 New Delhi
- National conference on Innovative Strategies to Enhance Teaching Learning Process. Sophia College Ajmer 29-30 August 2014. Lecture on Quality in Higher Education Core Issues, (Key Note Speaker).
- Asian Summit on Education and Skills 8-11 Sep 2014, India Diadactic Association Delhi
- Lecture MDSU 19.9.14 Research Methodology, Two lectures on Data Collection, Process and Analysis.
- Biannual International Conference on Entrepreneurship, Tourism and Environment. Chair Session 11-12 October, 2014. Presented paper 'Climate Change and Ecosystem Health: Observations from Semi-Arid Regions of Rajasthan.
- Trends of Climate Change and Biodiversity in Arid and Semi-Arid Regions of Rajasthan National Conference on Biodiversity at IIS University, Jaipur Oct 29, 2014
- Quality Reforms for Sustainable Development". Organized by Operational Research Society of India, Ajmer. 31<sup>st</sup> March 2013 DAV College Ajmer
- Ecosystem Health and Human Impacts: Core Issues for Sustainable Development,. National Conference on Environmental Impact Assessment and Sustainable Development. Kanodia College Jaipur, December 6<sup>th</sup> 2013.
- International Seminar & Award ceremony on Eco-tourism Development Prospectus in Rajasthan. SANCH Foundation, 30-31 December, 2012 Mt Abu
- Chaired a session in National Conference on Management and Accountability in Higher education, Delivered a lecture on Quality in Hr Education Core Issues held in Government College Ajmer on 8-9 Jan 2011.
- Coordinator Group Discussion in a National Workshop on Environmental Economics held in Central University of Rajasthan 22-23 Feb 2011.

- Participated in the Workshop on 'Science-Based Policy Options for Climate Change Adaptation in Rajasthan' by SPCB Government of Rajasthan 24-25 Feb 2011.
- International Conference of APQN (Asia Pacific Quality Network) on Quality in Higher Education, organized by National Assessment and accreditation Council, Bangalore 2-4 March 2011

कम्प्यूटर विज्ञान  
विभाग

DEPARTMENT  
OF  
COMPUTER SCIENCE

1. Name of the Department : DEPARTMENT OF COMPUTER SCIENCE
2. Year of Establishment : 1994
3. Is the Department part of a School / Faculty of the university? :SCHOOL OF ENGINEERING AND SYSTEM SCIENCES
4. Names of programmes offered:  
(UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)

Name of Course	Level
1. MCA	PG
2. MCA (Lateral Entry)	PG
3. M. Tech (Computer Science	PG
4. Ph. D. (Computer Science)	Ph.D

5. Interdisciplinary programmes and departments involved: (N/A)
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: (N/A)
7. Details of programmes discontinued, if any, with reasons: M. Sc. (Computer Science)  
(Discontinued due to lack of students)
8. Examination System: Semester Scheme
9. Participation of the department in the courses offered by other departments: (N/A)
10. Number of teaching posts sanctioned, filled and actual (Professors /Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor			1
Associate Professor			
Asst. Professor			
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualifications	Designation	Specialization	No .of Years of Experience	No. of Ph.D./ M.Phil. students guided for last 4 years
<b>Prof. Neeraj Bhargava</b>	Ph. D Computer Science,	Professor	Spatial Database Management Systems and Image Processing	26 years	2 enrolled



- Chapters in Books (9)
- Edited Books (1)
- Books with ISBN with details of publishers (9 nos.)
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Citation Index – range / average (74)
- SNIP
- SJR
- Impact Factor – range / average
- h-index (5)

23. Details of patents and income generated (N/A)

24. Areas of consultancy and income generated (N/A)

25. Faculty selected nationally / internationally to visit other laboratories / institutions industries in India and abroad

**Prof. Neeraj Bhargava**

26. Faculty serving in:

- National Committees:

Name of Committee	Faculty Name	Position Held
National Institute of Electronics & Information Technology, Kekri, Rajasthan	Prof. Neeraj Bhargava	Executive Council Member
Saurashtra University, Rajkot	Prof. Neeraj Bhargava	Member, Board of Studies
Hemachandracharya North Gujarat University, Patan	Prof. Neeraj Bhargava	Member, Board of Studies
Atal Bihari Vajpayee Hindi Vishvavidyalaya, Bhopal	Prof. Neeraj Bhargava	Member, Board of Studies

- International Committees: Nil

- Editorial Boards

Name of Committee	Faculty Name	Position Held
Board of Secondary Education, Rajasthan	Prof. Neeraj Bhargava	Convener, Book publishing of Class X, XII
Suresh Gyan Vihar University Journal of Engineering & Technology	Prof. Neeraj Bhargava	Member
International Journal of Science, Spirituality, Business and Technology (IJSSBT)	Prof. Neeraj Bhargava	Member
International Journal of Computer Applications Technology and Research (IJCATR)	Prof. Neeraj Bhargava	Member
International Scientific Academy of Engineering and Technology	Prof. Neeraj Bhargava	Member
Journal of Innovation & Management Engineering & Technology	Prof. Neeraj Bhargava	Member

- Any other

Name of Committee	Faculty Name	Position Held
Rajasthan Public Service Commission, Ajmer	Prof. NeerajBhargava	Member, Secrecy Matters
MLS University, Udaipur	Prof. NeerajBhargava	Member, Board of Studies
Maharaja Ganga Singh University, Bikaner	Prof. NeerajBhargava	Member, Board of Studies
MJRP University, Jaipur	Prof. NeerajBhargava	Member, Board of Studies
MDS University, Ajmer	Prof. NeerajBhargava	Convener, Board of Studies Convener, Committee of Courses Member, Academic Council
Vardhaman Open University, Kota	Prof. NeerajBhargava	Member, Board of Studies
Computer Society of India	Prof. NeerajBhargava	Life Member

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs). **(N/A)**

28. Student Projects:

- Percentage of students who have done in-house projects including inter-departmental projects: 100%
- Percentage of students doing projects in collaboration with other universities/industry/ institute: Nil

29. Awards/recognitions received at the national and international level by:

- Faculty
- Doctoral/post-doctoral fellows
- Students

30. Seminars/conferences/workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

31. Code of ethics for research followed by the departments:

32. Student profile programme-wise:

Name of the Programme	Applications Received	Selected		Pass Percentage	
		Male	Female	Male	Female
MCA	50	00	22	74.62	79.31
MCA (Lateral Entry)	09	02	05	73.28	74.67
M.Tech. (Comp. Sci.)	11	06	03	78.14	66.41
Ph.D. (Comp. Sci.)					

33. Diversity of students:

34. How many students have cleared Civil Services and Defense Services examinations NET, SLET, GATE and other competitive examinations? Give details category-wise.

- NET (2 nos.)
- SET (2 nos.)

35. Student Progression:

Student Progression	Percentage against enrolled
UG to PG	100%
PG to M. Phil	Nil
PG to Ph.D.	Nil
Ph.D. to Post-doctoral	Nil
Employed:	
Campus Selection	
Other than campus recruitment	100%
Entrepreneurs	Nil

36. Diversity of staff:

Percentage of Faculty who are graduates	
Of the same University	
From other universities within the state	
From universities from other states	100%
From universities outside the country	

37. Number of faculty who were awarded M. Phil, Ph. D., D. Sc. And D. Litt during the assessment period:  
N/A

38. Present details of departmental infrastructural facilities with regard to

- Library (Yes)
- Internet facilities for staff and students (Yes)
- Total number of class rooms (4 nos.)
- Class rooms with ICT facility (6 nos.)
- Student's Laboratories (6 nos.)
- Research Laboratory (1 no.)

39. List of Doctoral, post-doctoral students and research associates

- From the host institution/university Nil
- From other institutions/universities Nil

40. Number of post graduate students getting financial assistance from the university. (N/A)

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Study of latest technological updates as per the Washington Accord
- Implementing the latest technological changes in the form of syllabi
- Proposing the new programme in the Board of studies
- Approval of Academic Council sought

42. Does the department obtain feedback from:

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Feedback is obtained from faculties on the curriculum for refinement on a regular basis and suitable suggestions and feedbacks are implemented after scrutiny.

b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Feedback of students on staff is obtained through mentors and feedback is later provided to the HOD and staff/faculty for refinement.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?  
(Alumni association not framed for the department so far)
43. List the distinguished alumni of the department (maximum 10)  
(Alumni association not framed for the department so far)
44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts.
45. List the teaching methods adopted by the faculty for different programmes.
- Lecture Method: Teaching through lectures by using black board as well as LCD projectors, e-learning methodology using Moodle
  - Interactive method: Teaching through conducting debates on the topics related to the subject handling
  - Project based learning: Analyzing, designing, implementing and documenting skills of the students are improved by assigning mini-projects, half semester projects and full semester projects.
  - Computer assisted learning: Quizzes are conducted through learning management system
  - Experimental Learning: The students are trained to do programming through lab experiments.
  - Seminars: The students are encouraged to take technical seminars which are used to improve the presentation skills of the students.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
The department ensures that programme objectives are met through lectures, tutorials, assignments, seminars and live projects.  
The board of studies, academic council meet every year and the syllabi are looked at in detail and based on the necessity refinements amendments to the syllabi on par with the industry standards are carried out.
47. Highlight the participation of students and faculty in extension activities.  
Participation of students and faculties is encouraged in conducting/attending seminars, conferences, workshops and other activities of the departments.
48. Give details of “beyond syllabus scholarly activities” of the department.
- Courses on soft skills, general aptitude and technical aptitude are taught to all students.



- Add-on programs are conducted by the department to equip the students with skills required by industries.
  - Seminars and workshops are arranged to improve the technical skills of the students and to make them aware of current technology.
49. State whether the programmes/department is accredited/graded by other agencies? If yes, give details (N/A)
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- Bright and motivated students have a provision to register for industry certified add-on courses.
  - The department organizes Cisco network Training programme for the students. The course is divided into four modules:
    - i. Networking fundamentals
    - ii. Routing protocols and concepts
    - iii. LAN switching and wireless
    - iv. Accessing the WAN

In order to conduct the modules by giving sufficient practical exposure, the laboratory is equipped with hardware like routers, switches, wireless adapter, cables and PC Packet tracers software is also installed in PC's to simulate the various network configuration and give a better understanding to the students.
51. Detail five major Strengths, Weakness, Opportunities and Challenges (SWOC) of the department:
- Strength:
    1. Demand for the course in market
    2. Excellent infrastructure
    3. Motivated faculty members
    4. Good number of courses
    5. Learning Management System
  - Weakness:
    1. Less number of faculties
    2. Lack of funded projects
    3. Less number of international conferences and symposiums
    4. Volatility in market demand
    5. MoU with industries
  - Opportunities:
    1. Financial autonomy
    2. Internal/external funding for projects
    3. Recognition to inventions through patent
    4. Autonomy in curriculum development
    5. Organizing international conferences
  - Challenges:
    1. Competition from other universities colleges is very high
    2. Getting funded projects
    3. Training students beyond academics
    4. Fluctuating demand in industry
    5. Getting faculty with experience
52. Future plans of the department:
- Choice based credit system
  - Implementing usage of Moodle for evaluations
  - Upgrade syllabus regularly
  - Introducing Integrated MCA (iMCA) after 12<sup>th</sup> a five year course curriculum

- Expose our students to various programmes that are held in other colleges in India and abroad
- **Development of image processing, GIS, Pattern Recognition Laboratory.**
- **Centre for Computer Vision**

**पर्यावरण विज्ञान  
विभाग  
DEPARTMENT  
OF  
ENVIRONMENTAL  
SCIENCE**

1. **Name of the Department-** ENVIRONMENTAL SCIENCE
2. **Year of establishment** – 1993
3. **Is the Department part of a School/Faculty of the University-** Faculty of Science
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**
  - Ph.D.
  - M.Phil
  - M.Sc Environmental Science
  - Post Graduate Diploma in Industrial Safety, Health & Environment (PGDISHE)
  - PG Diploma in Disaster Management

**Courses to be started from 2016-17**

- Diploma in Biodiversity Appreciation
  - Diploma in Ornithology
5. **Interdisciplinary programmes and Departments involved-**  
Since 2105-16 Courses in M.Sc. Microbiology and M.Sc. Environmental Science are being run in CBCS scheme in the Departments of Microbiology and Department of Environmental science
  6. **Courses in collaboration with other universities, industries, foreign institutions, etc.** NIL
  7. **Details of programmes discontinued, if any, with reasons**  
M.Phil. Course was conducted as Self Financing course and was discontinued due to no admissions
  8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
    - P.G - Choice Based Credit System
    - Diploma in PGDISHE- Annual
  9. **Participation of the department in the courses offered by other departments.**  
**Microbiology-** Prof. Praveen Mathur and Prof Subroto Dutta
  10. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

Post	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	Nil	2
Associate Professor	1	Nil	Nil
Assistant Professor	2	2 (Both promoted to Professor through CAS)	Nil

11. **Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil. Students guided for the last 4 years
Prof. Praveen Mathur	M.Sc.; Ph.D. (Czech Republic), P.G.Diploma in Environmental Impact Assessment; P.G.Diploma in Environmental Law (NLSIU, Bangalore)	Professor	Environmental Impact Assessment, Environmental Law, Hydrobiology, Ornithology, Ecotourism	23 years	Ph.D- 4 M.Phil-3
Prof. Subroto Dutta	M.Sc.; Ph.D.; Post. P.G. Diploma in Environmental Ecology	Professor	Environmental Geology, Hydrochemistry, Hydrology	25 years	Ph.D-3 M.Phil- 1

## 12. List of senior Visiting Fellows, adjunct faculty, emeritus professors –

Department of Microbiology: Faculty teaches Environment students who have offered courses in Microbiology for MSc Environmental Science (CBCS)

Department of Botany: Prof. K.C. Sharma for Ecomodelling and Ecology.

## 13. Percentage of classes taken by temporary faculty – programme-wise information

### Alternative teaching arrangements in Environment Department

S. No.	2014-15	2015-16
<b>Guest Faculty</b>		
1	Dr. Ashwani Kr. Yadav	Dr. Ashwani Kr. Yadav
2	Parul Sen	Parul Sen
3	Monika Kumawat	Monika Kumawat
4	Naresh Choudhary	Naresh Choudhary
<b>Permanent Faculty</b>		
	Prof. Praveen Mathur	Prof. Praveen Mathur
	Prof. Subroto Dutta	Prof. Subroto Dutta
<b>Adjunct Faculty</b>		
1	Dr. Ashish Bhatnagar	Dr. Ashish Bhatnagar
2	Dr. Monika Bhatnagar	Dr. Monika Bhatnagar

S.No	Name	% age
	Prof. Praveen Mathur	15.38
	Prof. Subroto Dutta	17.58
	Dr. Ashwani Yadav	12.08
	Parul Sen	12.08
	Monika Kumawat	10.98
	Naresh Choudhary	12.08

	Dr. Ashish Bhatnagar	3.29
	Dr. Monika Bhatnagar	9.89

**14. Programme-wise Student Teacher Ratio**

M.Sc. 40:8

Ph.D. 2.5:1

**15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual**

Designation	Sanctioned	Filled	Actual
Lab Assistant	1	1	1
Lab Boy	1	1	1
UDC	1	1	1
IV Class	1	1	1

**16. Research thrust areas as recognized by major funding agencies: EIA****17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. NIL****18. Inter-institutional collaborative projects and associated grants received -NIL**

a) National collaboration

b) International collaboration

**19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. NIL****20. Research facility / centre with**

- state recognition
- national recognition **NIL**
- international recognition

**21. Special research laboratories sponsored by / created by industry or corporate bodies- NIL****22. Publications: ANNEXURE-I**

\* Number of papers published in peer reviewed journals (national / international)

S.No	National	International
Prof. Praveen Mathur	6	1
Prof. Subroto Dutta	8	-

\* Monographs -Nil

\* Chapters in Books

**Prof Subroto Dutta**

S.No.	Title with page nos.	Book Title editor & Publisher	ISSN/ISBN No
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1	Subroto Dutta & Pinky Chowhan, 2008, Socio economic impact of drought in Rajasthan	Environment and Sustainable Development : Global Issues. R.K.Saxena, S.R. Scientific Pub. Agra	818880567X
2	Subroto Dutta & Vinita Gupta, 2008, Socio effects of Tourism on Environment of Ajmer	Challenges to Environment Protection R.K.Saxena, S.R. Scientific Pub. Agra	8188805688

### Prof Praveen Mathur

S. No.	Title with page nos.	Details of Conference Publication	ISSN/ISBN No.	No. of Co-author s	Whether you are the main author	API Score
1	Singh R.P., Jiang Ying he, <b>Mathur Praveen (2009)</b> , Status of municipal wastewater treatment in some cities of India	Published by IEEE Proceedings ISIAT-2009, China pp:346-350	ISBN: 978-0-7695-3682-8 EI	2	No	2
2	Singh R.P. and <b>Mathur Praveen (2009)</b> Non point pollution of freshwater (lakes) with phosphorus and nitrogen – A case study of a fresh water lake in Rajasthan, India	13 <sup>th</sup> World Lake Conference proceedings, 2009, Wuhan-PR China pp 2896-2901	EI	1	No	4
	TOTAL					6

- \* Edited Books                   NIL
- \* Books with ISBN with details of publishers
- \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- \* Citation Index – range /average
- \* SNIP - Not known
- \* SJR -
- \* Impact Factor – range /average
- \* h-index

### Citation Indices as per Google Scholar

Faculty	Citation Indices	All	Since 2011
<b>1. Prof. Praveen Mathur</b>	Citation	112	82
	h-index	5	4
	i10-index	4	3
<b>2. Prof. Subroto Dutta</b>	Citation	26	26
	h-index	4	4
	i10-index	0	0

23. **Details of patents and income generated-** NIL
24. **Areas of consultancy and income generated-** NIL

25. **Faculty selected nationally / internationally to visit other laboratories / institutions/industries in India and abroad**

**Prof. P. Mathur:-** Invited in a Project of EU on Innovations in the hydrobiology studies and gave lectures and assisted students in field trips from 7<sup>th</sup> April to 1<sup>st</sup> May 2014.

26. **Faculty serving in**

**a) National committees b) International committees c) Editorial Boards d) any other (please specify)**

**Prof. Praveen Mathur:- National Committee**

➤ **Membership in BOS/COC**

- a. As External Member in Board of Studies in Environmental Sciences, Maharaja Ganga Singh University, Bikaner
- b. As External Members in Committee of Courses in Environmental Sciences in Mohanlal Sukhadia University, Udaipur.
- c. Convenor BOS/COC of Environmental Science, M.D.S. University Ajmer
- d. As External Expert nominated by Kulpati in Research Degree Committee, in Environmental Science, Rani Durgavati Vishwavidyalaya, Jabalpur.
- e. Member, Technology Development and Capacity Building, Algae Biofuel & Biomolecules Centre, since 18.7.2012
- f. Member, Ajmer Smart City Advisory Group on Environmental Conservation
- g. Inspector, Inspection team to Colleges for creation of Examiner Centre
- h. Co Coordinator PTET 2005, 2006, 2007, 2015

➤ **Membership in National Committees**

Member in Expert Appraisal Committee (EAC) of Ministry of Environment and Forests, Govt. of India in the Sector – River valley and Hydropower for a period of two years. From July 2011-2013.

**Prof Subroto Dutta:-**

1. Chief Proctor of the University since 2008 till date
2. Convenor Revaluation Committee since 2010 till Date
3. Co-Coordinator of Basic School Teachers Course Examination 2015 (BSTC-2015)
4. Convenor, Flying Squad committee for the Examination of the University
5. Member, Technology Development and Capacity Building, Algae Biofuel & Biomolecules Centre, since 18.7.2012
6. Member, Ajmer Smart City Advisory Group on Disaster Management
7. Member, Ajmer Smart City Advisory Group on Environmental Conservation
8. Centre Superintendent, University Campus Examination Centre 2009
9. Centre Superintendent, UGC NET Examination December 2009, M.D.S. University Campus Examination Centre
10. Inspector, Inspection team to Colleges for creation of Examiner Centre
11. Member, Distribution of Medals and Degree Committee of the Fifth Convocation of the University
12. Convenor, Employees Welfare Cell 2008
13. Member, Development of Sports Infrastructure And Equipments under U.G.C. XI Plan
14. Co Coordinator PTET 2005, 2006
15. Co-Coordinator BSTC 2007

27. **Faculty recharging strategies (UGC, ASC, Refresher /orientation programs,**

workshops, training programs and similar programs).

S. No	Details	Date
1.	Refresher Course in Environmental Science, organized by UGC-Academic Staff College, Maharshi Dayanand Saraswati University, Ajmer	11-09-2013 – 1-10-2013

## 28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects-NIL
- percentage of students doing projects in collaboration with other universities/ industry / institute -NIL

## 29. Awards/recognitions received at the national and international level by

- Faculty
  - **Prof. Praveen Mathur**
    - a) Awarded Jodhpur University Merit Scholarship to pursue research on Studies on the Physico-chemical and Microbiological aspects of polluted water bodies in Jodhpur region of Ph.D.
    - b) Selected for Czechoslovak Government Scholarship through the Ministry of Human Resources and Development, Govt. of India, to pursue research on 'Environmental Protection and Formation' leading to the award of Ph.D.
    - c) Awarded 'Research Associateship' of Council of Scientific and Industrial Research, J.N.V. University (erstwhile University of Jodhpur) Jodhpur, Rajasthan.
- Doctoral / post doctoral fellows
- Students

## 30. Seminars/ Conferences/Workshops/Days organized and the source of funding (national/ international) with details of outstanding participants, if any.



Training Room of the Department

**SEMINAR/CONFERENCE/WORKSHOPS/DAYS**

S. No	Details	Date	National Level
1.	One day Workshop on Current Challenges in Environmental Science Jointly organised by M.D.S. University, and M.G.S. University, Bikaner	Jan 26 <sup>th</sup> 2013	University
2.	Seminar on World Environment Day	5 <sup>th</sup> June 2013	University
3.	National Seminar on Water and Sewage Management in Department of Environmental Science, MDSU Ajmer	5-7 March 2013	University
<b>Days celebrated every year</b>			
4.	World Wetland Day	2 <sup>nd</sup> February	University
5.	World Wildlife Day	3 <sup>rd</sup> March	University
6.	World Forest day	21 <sup>st</sup> March	University
7.	World Water Day	22 <sup>nd</sup> March	University
8.	Earth Day	22 <sup>nd</sup> April	University
9.	World Heritage Day	28 <sup>th</sup> April	University
10.	World Migratory Day	9 <sup>th</sup> - 10 <sup>th</sup> May	University
11.	International Day for Biological Diversity Day	22 <sup>nd</sup> May	University
12.	World Environment Day	5 <sup>th</sup> June	University
13.	World day to combat desertification and drought	17 <sup>th</sup> June	University
14.	Rajiv Gandhi Akshay urja Divas	20 <sup>th</sup> August	University
15.	International day for the preservation of the ozone layer	16 <sup>th</sup> September	University
16.	World Wildlife week	1-7 <sup>th</sup> October	University
17.	International day for natural Disaster	13 <sup>th</sup> October	University
18.	National Birds Day	12 <sup>th</sup> November	University

**31. Code of ethics for research followed by the departments****32. Student profile programme-wise:**

Name of the Programme	Application Received	Selected		Pass Percentage	
		Male	Female	Male	Female
<b>M.Sc</b>					
2011	56	43.5	56.5	100	100
2012	43	47.4	52.6	100	100
2013	27	50	50	100	100
2014	20	72.7	27.3	Appearing	
2015	23	52.2	47.8	Appearing	
<b>Diploma</b>					
2011-12	19	33.4	66.6	100	100
2012-13	14	80	20	100	100
2013-14	13	70	30	100	100

2014-15	15	91.7	8.3	100	100
2015-16	25	94.4	5.6	Appearing	
<b>Ph.D</b>					
2010	10	80	20		
2011	-----	100	Nil		

### 33. Diversity of Students

Name of the Programme (refer to question no 4)	% of Students from the same University	% of students from other universities within the state	% of Students from universities outside the state	% of students from other countries
<b>M.Sc</b>				
2011	43.5	56.5	Nil	Nil
2012	36.8	66.2	Nil	Nil
2013	40	60	Nil	Nil
2014	9.1	81.8	9.1	Nil
2015	43.5	43.5	13	Nil
<b>Diploma</b>				
2011-12	80	20	Nil	Nil
2012-13	20	40	40	Nil
2013-14	60	20	20	Nil
2014-15	16.7	50	33.3	Nil
2015-16	5.6	44.4	50	Nil
<b>Ph.D</b>				
2010	80	20	Nil	Nil
2011	100	Nil	Nil	Nil

### 34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

UGC LS- 17, UGC JRF- 2, ICAR LS-3, SLET-22, Consultancy-40, Industries-13, School teaching- 37, university teaching- 3, civil services 3, pollution control board-6, NGOs- 3, Coaching centre-5, others-30

List of NET /SET Qualified students **ANNEXURE – II**

### 35. Student progression

Student progression	Percentage against enrolled
UG to PG	Not Applicable
PG to M.Phil.	Nil
PG to Ph.D.	1.9%
Ph.D. to Post-Doctoral	Nil
Employed	
Campus Selection Other than campus recruitment	Nil

Entrepreneurs	
---------------	--

### 36. Diversity of staff

<b>Of the same university</b>	<b>Nil</b>
<b>From other universities within the State</b>	<b>Nil</b>
<b>from universities from other States from</b>	<b>100%</b>
<b>University outside the country</b>	<b>Nil</b>

37. **Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period** -None

### 38. Present details of departmental infrastructural facilities with regard to

a) **Library**- 76 books

b) **Internet facilities for staff and students** – Facility available for the faculty and research scholars.

c) Total number of class rooms- Three classroom

d) Class rooms with ICT facility - One

e) Students' laboratories - Two labs

f) Research laboratories -One hitech lab + one Air lab

#### **Full Fledged Instruments Facility Available in Hi-tech lab**

- Atomic Absorption Spectrophotometer
- BOD Incubator
- GLC
- Flame Photometer
- Spectrophotometer
- pH- Ion electrode meter
- Oximeter
- Turbidity Mater
- EC/ TDS Meter

#### **Facility Available in Air Lab**

- Wind Monitor with temperature, relative humidity, rainfall, wind speed wind direction sensors
- Respirable Dust Sampler
- High Volume Sampler
- Noise Level Sampler
- SOx and NOx Analyser
- COD Digester
- Handy air sampler
- Oven, Incubator, Centrifuge
- Laminar Air Flow
- Fume hood and digester apparatus
- Hot plate, water bath and shaker machine.

#### **List of doctoral, post-doctoral students and Research Associates**

a) From the host institution/university (2011-15)

Prof. Praveen Mathur	Prof Subroto Dutta
Ms. Sarita Sharma	Mr. Manoj Kumar Meena
Miss. Kriti Sharma	Ms. Vinita Gupta
Mr. Anand Shobhawat	Ms. Pinky Chouhan
Mr. Yati Kachhawa	

b) from other institutions/universities - NIL

c) Number of post graduate students getting financial assistance from the university.

➤ Professional Faculty Fund Scholarship :-

1. One in M.Sc Previous
2. One in M.Sc Final

d) Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

e) Does the department obtain feedback from

- i. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? No
- ii. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? No
- iii. Alumni and employers on the programmes offered and how does the department utilize the feedback? No

f) List the distinguished alumni of the department (maximum 10)

#### ANNEXURE-III

S. No	Name	Placements
1.	Bhoma Ram Jat	Head, Cairn Energy, Barmer
2.	Suraj Singh Rawat	NTPC, Anta power Station
3.	Vinod Kumar Agarwal	Environment, LANCO, Nagpur
4.	Rajendra Prasad Singh	Associate Professor in SEU, China
5.	Manoj Panwar	Hydro geologist, Bikaner PHED deptt
6.	Mr. Deepak Rathi	MD in Bharat Agro
7.	Dr. Prabhu Dan Charan	Assistant Prof. in Maharaja Ganga Singh University, Bikaner
8	Deepak Ojha	Junior Scientific Officer at RSPCB, Kishangarh
9	Kriti Sharma	Junior Scientific Officer at RSPCB, Kishangarh
10	Manoj Kumar Meena	Junior Scientific Officer at RSPCB, Kishangarh

g) Give details of student enrichment programmes (special lectures/ workshops /seminar) involving external experts.

S.No.	Programme	External Expert	Date
1.	Workshop on Sewage Management Organized by Department of Environmental	1. Er. Anil Jain (PHED) 2. Mr. A.K.Rajani, Geo Miller- New Delhi	7 <sup>th</sup> – 8 <sup>th</sup> March 2008

	Science & District Committee of Environment, Ajmer	3. Dr. Sanjay Mathur, Jaipur 4. Prof. A.B. Mathur, MNIT	
2.	Workshop on Renewable Energy	1. Dr. Sudhir Jain (Dept. of Renewable Energy, MPUAT, Udaipur). 2. Dr. Deepak Sharma (Dept of Renewable Energy Sources, MPUAT, Udaipur) 3. Dr. H.C. Jain Retd. Principal RIE, Ajmer 4. Mr. Ajay Vikram Singhji Retd. IAS	19-20 August 2008
3.	National Seminar on Water and Sewage Management	1. Prof Y.P. Mathur, Dept of Civil engineering, MNIT Jaipur. 2. Er. Anil Jain (PHED) 3. Mr. A.K.Rajani, Geo Miller- New Delhi. 4. Dr. D.R. Jangid. 5. Mr. Bhuvanesh Agnihotri	5 <sup>th</sup> – 7 <sup>th</sup> March 2013
4	Wildlife Week	1. Prof. G.R.Jakhar, V.C. MGS University, Bikaner. 2. Mr. Mahendra Vikrm Singh, BCS Ajmer. 3. Dr.K.K. Sharma, Secretary, BCS, Ajmer 4. Dr. Manoj Mathur, Hony. Wildlife Warden Ajmer District. 5. Dr. Satish Sharma, Forest Department Udaipur	1 <sup>st</sup> - 7 <sup>th</sup> 2012
5	Indo-Ecuador Seminar on recent challenges to global environment and policy framework for solutions.	1. Prof. Juan Carlos, Director (Admn. University Javeriana. 2. global issues related to Environment Dean Environmental Science of Escuela Politecnica Javeriana of the Republic of Ecuador 3. Thematic Lecture Environmental Issues of Ecuador by Head Environmental Studies of Escuela Politecnica Javeriana of the Republic of Ecuador	24 <sup>th</sup> – 25 <sup>th</sup> 2011

**h) List the teaching methods adopted by the faculty for different programmes.**

<b>Program</b>	<b>Methods</b>
<b>P.G</b>	<b>Lecture, Seminar, Tutorial, Practical, Demonstration</b>
<b>Diploma</b>	<b>Lecture, Seminar, Tutorial, Demonstration</b>

**i) How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?**

Primary mission of the Department of Environmental Sciences is to impart environmental knowledge to students and develop research and evaluation programmes. Towards this end, the laboratory of the department has been provided with infrastructure facilities to meet the requirement of water, air, soil and biological sample analysis.

Ensure that the concern for a clean environment is clear and uncompromising. University in its ongoing commitment to the principle and practice of sustainable development has decided to channelize and utilize the intellectual resources of the University to encourage a better understanding on part of the society of the interrelated physical, biological and social dangers facing the planet Earth. Department of Environmental Science intends to establish whatever programmes are necessary within the university to generate the capability and the capacity necessary to develop appropriate environmental technologies and practices as well as to diminish environmental illiteracy and enhance ethical awareness on the part of faculty, students, and the public at large. Developing a world population that is aware and concerned about the total environment and its associated problems.

***Vision***

To become an internationally renowned, preferred and acknowledged department through highest standards of teaching, research, creative expression, leadership potential and service to the community.

***Mission***

The Department of Environmental Science is committed to the principle of harnessing science and technology for the benefit of humankind. We are committed to the fulfillment of this principle through the accomplishment of our mission:

- to create and effectively disseminate fundamental knowledge about Environment;
- to train students and educate the broader public in the Environmental Sciences; and
- to integrate, synthesize, and apply scientific and engineering knowledge to societal problems, such as the sustainable use of energy and water resources, the identification and mitigation of risks posed by natural hazards, and the consequences of human activities on the environment.

**j) Highlight the participation of students and faculty in extension activities.**

- Students actively participate in Blood Donation Camp; students also participate in Environmental Awareness campaigns which are dedicated to promote awareness and activism to the community by providing information concerning environmental related issues. The Youth achieve this goal by providing information material in the form of brochures, presentations, and educational videos. These prompts will be presented, as well as distributed to the community, including schools and Public Facilities
- Faculty – One of the faculty is programme Co-ordinator and NSS In charge of Unit-I. The faculty are invited to deliver lectures in various NSS activities as well as in schools, colleges and NGO's.

**48. Give details of “beyond syllabus scholarly activities” of the department.**

The Department engages in various activities like Nature Trails, Trekking, Pollution Monitoring Activities at various Congested Areas regularly. The students also participate in Bird Watching

activities.

49. **State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.** No

50. **Briefly highlight the contributions of the department in generating new knowledge, basic or applied.**

The Department contribute in its own way by celebrating various Days of Environmental concern. The Media then highlights the significance of such days and local people are made aware of the consequences of their behaviour.

51. **Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

Strength –

- 1) Separate Building
- 2) Infrastructure
- 3) Good Placement Record
- 4) Job Oriented Courses
- 5) Two Permanent Faculty

Weaknesses

- 1) Lack of Minimum Permanent Faculty
- 2) Staff is not sufficient – Librarian, Gardener
- 3) Time constraint does not allow sufficient time to the faculty for publication

Opportunities

- 1) The Department is playing key role in overseeing the Compulsory paper of Environment which is being taught in all streams at Undergraduate level.
- 2) The Faculty offers Consultancy to Colleges for their Green Audits and Environmental Concerns

Challenges

- 1) **The Department is desperately trying to get some collaboration with other Universities and trying to establish Industry – University Linkage.**

52. **Future plans of the department.**

The Department would like to hold an Alumni Meet and publish a Directory of Alumni. The Department would also like to go for Consultancy.

## ANNEXURE-I

## Prof Praveen Mathur: (2011-2015)

S. No.	Title with page nos.	Journal	ISSN/I SBN No	Whether peer reviewed. Impact Factor, if any	No. of Co-authors	Whether you are the main author	API Score
1.	Anand Shobhawat, <b>Mathur Praveen</b> & Sangeeta Patan (2011) Why Indian Universities need Waste Management System: A case study of Waste Management System in M.D.S. University, Ajmer (Raj). Page no:46-55	International Journal of Environment and Earth Science	ISSN 0976-741X	Yes	2	No	
2.	R P Singh, Da-fang Fu, Li Cheng and <b>Praveen Mathur (2012)</b> . Structural Properties and Performance of Self-dynamic Membrane Bioreactor Using Sponges as Filter Material".	Archives Des Sciences, Vol.65, Issue. 7 pages 268-281	ISSN: 1661-464X SCI	Yes 0.474	3	No	
3.	Praveen Mathur, Anand S. Shobhawat *, Sangeeta Patan <b>(2012)</b> Environmental management plan for rain water harvesting system in M.D.S. University, Ajmer- A case study, pp. 97-103.	International Journal of Environmental Sciences and Research.	ISSN 2249-9105	Yes	2	Yes	
4.	Mathur P, Patan S, Shobhawat S A. <b>(2012)</b> Need of Biomedical Waste Management System in Hospitals - An Emerging issue - A Review. Page no 117-124	Current World Environment	e-ISSN, 0973-4929	Yes	2	Yes	
5.	Sharma Kriti and Mathur P. (2014) A Sustainable Diet for a Sustainable Life: An Indian city, Ajmer as a Case Study,	International Research Journal of Environment Sciences	ISSN: 2319-1414	Yes	2	No	
6.	Patan S, Mathur P. (2015) Assessment of biomedical waste management in government hospital of Ajmer city – a study, 5(1); 6 – 11	International Journal of Research in Pharmacy and Science	ISSN: 2249-3522	Yes	2	No	

**Prof. Subroto Dutta (2011-2015)**

S. No	Title with page nos and Journal		ISSN/ISBN No
1.	Ruchira Bharadwaj, Subroto Dutta and K.C.Sharma, 2011. Conserving Biodiversity of Medicinal Plants from Central Aravallis of Rajasthan, India . Vol 6(1), July –Sept.: 69-75	Journal of Environment Research and Development,	PARIS ISSN 0973-6921 E-ISSN: 2319-5983
2.	Ruchira Bharadwaj, Subroto Dutta and K.C.Sharma 2012. Alternative Food plants for sustainability in Extreme Climatic conditions of Rajasthan, India. Vol 26(2): 73-77	Journal of Environment and Bio-Science,	0973-6913
3.	Ruchira Bharadwaj, Subroto Dutta and K.C.Sharma, 2013. Study of threats status of plant community in the state of Rajasthan, India Vol 3(1):19-28	Bioscience Guardians,	2277-9493
4.	Dutta Subroto and Singh Shubhra, 2014. Assessment of ground water and surface water quality around industrial area affected by textile dyeing and printing effluents, Pali, Rajasthan, India. Vol 8 (3A) : 574-581	Journal of Environment Research and Development	ISSN 0973-6921 E-ISSN: 2319-5983
5.	Dutta Subroto and Khan Firoz 2014. Effect of lead on the health of silver jewellery workers : A case study of Ajmer city, Rajasthan, India. Vol 09 (02) : 356-361	Journal of Environment Research and Development	ISSN 0973-6921 E-ISSN: 2319-5983
6.	Subroto Dutta and Abha Sisodia, 2014. Accumulation of some heavy metals in roadside soil along the national highway-8 in Rajasthan (India). Vol 13 (4) :847-850	Nature Environment and Pollution Technology	ISSN : 0972-6268
7.	Bhargava Priti and Dutta Subroto,2014. Impact of Explosive Industry effluents on soil quality parameters and Heavy metal load – A study of RECL ( Rajasthan Explosive and Chemical Limited ) Dholpur, Rajasthan. Vol.3 (11), November : 1-7	International Research Journal of Environmental Science	ISSN 2319-1414
8.	Khan Firoz and Dutta Subroto, 2015. Occupational toxicity of copper and their health implications on industrial workers of Ajmer city, Rajasthan, India. Vol 9 (3A) : 833-839	Journal of Environment Research and Development	ISSN 0973-6921 E-ISSN: 2319-5983

**ANNEXURE – II**

**NET/NETJRF/SET QUALIFIED STUDENTS FROM DEPARTMENT OF  
ENVIRONMENTAL SCIENCE**

S. No.	Name of Student	Year	SET/NET in Environmental Science
1.	Abha Sisodia	2006	NET JRF,SET
2.	Achla Pancholi	2013	SET
3.	Anand Shobhawat	2006	SET
4.	Anil Kumar Patni	2001	Ag.NET
5.	Bhupendra Soni	2004	NET
6.	Chandresh Kumar	2007	NET
7.	Deepak Ojha	2007	NET
8.	Devendra Pratap Singh Meena	2008	NET
9.	Firoz Khan	2005	NET,SET
10.	Garima Sharma	2011	NET
11.	Giriraj Kumar Songara	2003	NET,SET
12.	Kriti Sharma	2007	SET
13.	Lalit Dhakad	2013	SET
14.	Mahesh Kumar Verma	2003	SET
15.	Manoj Meena	2005	Ag.NET
16.	Meenakshi Sankhla	2006	SET
17.	Monika Kumawat	2011	SET
18.	Namrata Dangara	2010	SET
19.	Naresh Choudhary	2005	NET,SET
20.	Neelima Nair	2008	SET, NET
21.	Parul Sen	2013	SET
22.	Pooja Soni	2014	SET
23.	Prabhu Dan Charan	2005	NET JRF,SET
24.	Prama Esther Andrew -Soloman	2007	NET
25.	Pratibha	2005	SET
26.	Radhika Jhanwar	2003	NET
27.	Rajendra Prasad Singh	2001	Ag.NET
28.	Sangeeta Patan	2008	NET
29.	Shiv Nath Chalka	2002	NET
30.	Smita Sharma	2003	NET
31.	Smita Yadav	2013	SET
32.	Subhash Rajora	2005	NET
33.	Sudhir Verma	2008	SET 2010
34.	Surendra Nawal	2006	SET
35.	Surendra Verma	2003	NET
36.	Urvashi Haldania	2012	SET
37.	Vinita Agarwal	2012	SET
38.	Vinita Gupta	2012	NET
39.	Yati Kachhawa	2005	SET

## ANNEXURE-III

**LIST OF ALUMNI OF THE DEPARTMENT**

S. No	Name of Student	Year of passing	
1.	Rajesh Singh	2000	Geomatics & Environment Solutions Pvt Ltd
2.	Bhoma Ram Jat	2000	Head, Cairn Energy Barmer.
3.	Mukesh Kumawat	2013	Cairn Energy Barmer.
4.	Ravindra Chodhary	2014	Cairn Energy Barmer.
5.	Anil Patni	2001	Bihar Urban Development Investment Programme, ADB project
6.	Suraj Singh Rawat	2006	NTPC, Anta power Station
7.	Mohit Chourasia	2001	Allen Career Institute, Kota
8.	Bhanwar Malviya	2004	Coaching Institute Pali
9.	Chandra Shekhar Chouhan	2002	Ramji Envirotech, Jaipur Mine
10.	Mahaveer Prasad Saini	2002	SMEC India Pvt Ltd
	Pradeep Sharma	2002	Team Institute, Jaipur.
11.	Shiv Nath Chalka	2002	CEG Consultancy Jaipur
12.	Pramod Dagla	2003	Enviroconcept India Private Ltd, jaipur
13.	Purnima Panwar(Rathore	2004	J. M. Envirostudies Pvt. Ltd. Jaipur
14.	Yati Kachhawa	2005	Enkay Enviro Services Pvt. Ltd. Jaipur
15.	Vinod Kumar Agarwal	2005	Environment, LANCO, Nagpur
16.	Ruchika Sharma	2005	Proprietor Enen management group
17.	Shilpi saraswat	2006	Vardan (Environet) mining sector, Gurgaon, Pvt limited
18.	Satish kumar	2007	Gujarat consultancy Biomedical waste management
19.	Sudhir Verma	2008	Environmental officer EC Engineers Jaipur
20.	Neha Jain	2013	Environmental officer EC Engineers Jaipur
21.	Rohit Pandey	2016	Environmental officer EC Engineers Jaipur
22.	Lokendra Singh	2009	RK Consultancy, EIA Jodhpur FAE (Cat. B Projects) in Mining for Air Pollution, Solid and Hazardous Wastes
23.	Yogesh Jatav	2010	Environmental officer, in RK Consultancy
24.	Kamlesh Kumar	2009	Environmental officer, Minetech pvt Limited Udaipur
25.	Vikram Singh Sekhawat	2010	Associates Stone Industries Ltd ,
26.	Yogesh Jatav	2010	Environmental officer R.K consultant, Jodhpur
27.	Kamod Kanwar Rathore	2012	Environmental officer, Minetech, Udaipur.
28.	Malti Garg	2012	Environmental officer, Team institute of Science & technology pvt. Ltd.
29.	Ginni Barotia	2013	Environmental officer, Team institute of Science & technology pvt. Ltd
30.	Poonam Kanwar	2012	Environmental officer, Overseas Min Tech

			Consultant, Jaipur (Raj.)
31.	Ashok Sharma	2013	Environmental officer, JM Enviro net, Mumbai
32.	Gaurav Upadhyay	2013	Environmental officer ABC Technolabs India Pvt Ltd, jaipur
33.	Pradeep Kumar	2013	Environmental officer JM Enviro net Jaipur
34.	Smita Yadav	2013	Environmental officer JM Enviro net Jaipur
35.	Dinesh Singh	2011	Environmental officer J.M. EnviroNet Pvt. Ltd. Gurgaon, Haryana
36.	Pooja Arya	2008	Environmental officer Environmental Consultant, Seg limited
37.	Saurabh Agrawal	2002	Ambuja Cement Ltd.
38.	Avinash Chandra Sharma	2007	Binani Cement Ltd. Sirohi Road
39.	Pushpendra Choudhary	2007	Shree Cement Ltd. (Roorkee)
40.	Chandresh Kumar	2007	Ultratee Kotpulli Jaipur
41.	Ajay Sharma	2010	Jaypee cement Himachal Cement Plant Himachal Pradesh
42.	Satish Saini	2013	Ambuja Cement Ltd, Rabariyawas
43.	Arun Kumar Tripathi	2013	Ambuja Cement Ltd
44.	Mayank Mangal	2013	Ambuja Cement Ltd
45.	Subhash Rajora	2007	Binani Cement,
46.	Nandkishor Chhangani	2012	Hindustan Zinc, Vedanta
47.	Manish Vyas	2013	SCS Enviro sevices (At the site of Hindustan Zinc Limited chanderia Chittorgarh, Raj)
48.	Ravi Patidar	2013	SCS Enviro sevices (At the site of Hindustan Zinc Limited chanderia Chittorgarh, Raj)
49.	M.S. Sudhir	2014	Hindustan Zinc ltd
50.	Sanagapati Chandrasekhar Babu	2014	Hindustan Zinc ltd
51.	Yagaya dev Dadhich	2009	Env. Chemist, Waste water plant ETP balotra
52.	Mukesh Sherawat	2009	BASF the chemical company
53.	Manoj Panwar	2006	Hydro geologist, Bikaner PHED deptt
54.	Mr. Deepak Rathi (M.D)	1995	MD in Bharat Agro
55.	Mohd.Saleem	2012	Triveni group of Industries Pvt.ltd gurgoan.
56.	Nirmal Patidar	2013	Thermal Power Plant in Jhalawar
57.	Rai Singh	2001	Senior Research Fellow CPCB
58.	Hemendra Roat	2001	Junior Scientific Officer, CPCB Baroda Gujarat
59.	Naresh Choudhary	2001	SRF at CPCB, Agra
60.	Surendra Verma	2003	Junior scientific Officer, Bikaner
61.	Giriraj Kumar Songara	2003	Junior Scientific Officer, Chittorgarh
62.	Ruchira Bhardwaj	2004	Senior Research Fellow, CPCB, Lucknow

63.	Bhupendra kr. Soni	2004	Junior Scientific Officer, R.P.C.B, Regional Officer, Udaipur.
64.	Manoj Kumar Meena	2005	Junior Scientific Officer, RSPCB, Jaipur
65.	Kriti Sharma	2007	Junior Scientific Officer at RSPCB, Kishangarh.
66.	Deepak Ojha	2007	Junior Scientific Officer at RSPCB - Jodhpur
67.	Devendra pratap singh meena	2008	Junior Scientific Officer, Pali
68.	Hitesh Kumar	2009	Junior Scientific Officer, Kota
69.	Namrata Dangara	2010	Junior scientific officer, Chittorgarh
70.	Santosh Basithiya	2009	Junior Scientific Officer RPCB, Head Office Jaipur
71.	Shalini Chaturvedi	2000	Co-ordinator, kanha makhan public school mathura
72.	Mahesh Kumar Verma	2003	Science Teacher in Private School Jalawar
73.	Swati Beatty	2003	School teacher in Little World School, Jabalpur, M.P
74.	Sikha Beatty	2004	School Teacher in Libemo Memorial School Wokha, Nagaland
75.	Rakesh Pilania	2003	Science Teacher in Pilani
76.	Purshottam Malav	2003	III Grade Teacher kota distt.
77.	Ritu Sankhla	2000	IIInd Grade Teacher, Vijay nagar, Bhinai
78.	Mudita Nag	2003	Teaching in Maheshwari Public School
79.	Meenal Kasiwal	2000	Teaching, SVM School, Jaipur
80.	Mahaver Meena	2000	Science Teacher, Govt sec school
81.	Hemraj Meena		Govt Teacher, Dholpur
82.	Tripti Sharma		II grade teacher, Madhya pradesh.
83.	Vandana Gautam		III Grade Teacher, Jhalawar
84.	Alka Sisodia		III Grade teacher, Bikaner
85.	Manjari Garg	2002	Lecturer, Mayo College Ajmer
86.	Shweta Kabra		Teacher, III Grade Teacher
87.	Dheeraj Bansiwali		Teacher govt school Tonk
88.	Seema Mishra	2006	
89.	Rashmi Saraswat	2006	Teacher, DAV public school, Pune
90.	Manisha Sharma	2007	Teacher DPS Jammu
91.	Silky Bhati	2007	Teacher in School Ahmedabad
92.	Mahaveer Meena	2009	II Grade Teacher
93.	Sona kumari	2009	Kendriya Vidhalaya II Grade Teacher, Jammu & Kashmir
94.	Anju Jangid	2009	Teaching at Merta city
95.	Jagdev	2012	Teacher at merta city
96.	Jyoti Sharma	2002	Lecturer, Mody College Sikar
97.	Harshika Tikku	2002	Lecturer in MJ College, Jalgaon, Maharashtra
98.	Bhawna Mathur	2001	Lecturer at Sri Balaji Technical University,

			Jaipur
99.	Charu Jhamaria	2001	Lecturer ICG, Jaipur
100.	Smita Sharma	2003	Working at S S Jain Subodh College
101.	Babulal Regar		Assistant Prof. Arya College of Engineering and Technology
102.	Shweta Sharma	2005	Lecturer Engineering College Delhi
103.	Kirti Parashar		SDM College Bhilwara
104.	Seema Joshi	2004	D N college, M.Phil Hisar
105.	Geetanjali Ganguli	2005	Asst Prof. (civil engg.) Arya college of Eng and Research center Jaipur
106.	Chitra Sabnani	2010	Teaching in Private Engg. College
107.	Pinky Chouhan	2005	Teacher, Mayo College, Ajmer
108.	Anita Gaur	2005	Teacher , Tak Shiksha Niketan B.Ed college Ajmer
109.	Prabhu DanCharan	2005	Assistant Prof. in Maharaja Ganga Singh University, Bikaner
110.	Swati Bhatnagar	2002	Lecturer, B.Ed College

खाद्य विज्ञान  
एवं  
पोषण  
विभाग

DEPARTMENT  
OF  
FOOD SCIENCE  
&  
NUTRITION

1. Name of the Department : Food Science and Nutrition
2. Year of establishment : 1994
3. Is the Department part of a School/Faculty of the university? Faculty of Science
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) .

No.	Course
1	B.Sc. Food Science & Nutrition
2	M.Sc. Foods and Nutrition
3	Advanced (Post PG) Diploma in Food and Health Security
4	M. Phil.
5	Ph.D.

5. Interdisciplinary programmes and departments involved :

Collaboration with Algae Biofuel & Biomolecules Centre of the Department of Microbiology. This is a study Centre established for Interdisciplinary Research which involves Faculty from Microbiology, **Food Science & Nutrition**, Environmental Science, Economics and Management.

6. Courses in collaboration with other universities, industries, foreign institutions, etc.:

- **Academic collaborations** with Mohan Lal Sukhadia University, Udaipur for researches on Awla and Garlic.
- **Academic collaborations** with Krishi Vigyan Kendra Ajmer for field researches in the field of Community Nutrition.
- **Academic collaborations** with Desert Medicine Research Centre, Jodhpur.
- **Academic collaborations** with All India Institute of Medical Sciences, New Delhi , PGI (Chandigarh and Lucknow) , Apollo Hospital, Fortis, Escorts , Max Hospitals at Delhi, SDMH Jaipur for internships in Dietetics.
- **Academic collaborations** with Algae Biofuel and Biomolecules Centre, Department of microbiology, MDS University, Ajmer.
- **Academic collaborations** with Department of Microbiology JLN Medical College and Hospital, Ajmer for procuring microbial cultures and lab techniques

7. Details of programmes discontinued, if any, with reasons:

PG Diploma in Nutrition and Dietetics: Reason for discontinuation was that new programme Advanced (Post PG) Diploma in Food and Health Security under UGC innovative scheme was started in the year 2007.

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System:

1	B. Sc. Food Science and Nutrition	Semester
2	M.Sc. Foods and Nutrition	Semester
3	Advanced (Post PG) Diploma in Food and Health Security	Annual
4	M.Phil.	Annual
5	Ph.D.	Semester

## 9. Participation of the department in the courses offered by other departments :

The faculty of the Department assists in teaching certain portions, topics/components of the curriculum in other Departments of the University such as the

- Department of Yogic Science and Human Consciousness,
- Microbiology,
- Zoology,
- Botany and
- Environmental Science.

## 10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
<b>Professor</b>	1	Nil	3 ( Through CAS )
<b>Associate Professor</b>	1	1 (promoted to Professor through CAS)	Nil
<b>Assistant Professor</b>	3	2 (Both promoted to Professor through CAS)	Nil

## 11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Yrs of Experience	No. of Ph.D./ M.Phil. students guided for the last 5 years
Dr. G. Kalsi Kohli	Ph.D. & M.Sc. Foods and Nutrition	Professor	Public Nutrition, Research Methodology	34	2
Dr. Bharti Jain	Ph.D. & M.Sc. Foods and Nutrition	Professor	Food Science and Food Analysis, Clinical and Community Nutrition, advanced Nutrition	29	2
Dr. Ritu Mathur	Ph.D. & M.Sc. Foods and Nutrition	Professor	Clinical and Therapeutic Nutrition, Biochemistry, Institutional Food Administration, Food Microbiology	20	2

## 12. List of senior Visiting Fellows, adjunct faculty, emeritus professors :

List of Guest Faculty	
1	Dr. Namita Moyal
2	Ms. Poonam Jethani.
3	Dr. Poonam Mohan

4	Ms. Swati Mathur
5	Ms. Sakshi Pathak
6	Mr. R.S. Rao
7	Dr. Ashwini Kumar
8	Abhilasha Chauhan

List of Adjunct Faculty		
1	Department of Environmental Science	Prof. Praveen Mathur, Prof. Subroto Dutta
2	Department of Economics	Prof. Shiv Dayal Singh for Statistics
3	Department of Microbiology	Prof. Ashish Bhatnagar, Prof. Monica Bhatnagar
4	Department of Yogic Science and Human Consciousness	Dr. Lara Sharma, Ms. Aseem Jayanti Devi.

13. Percentage of classes taken by temporary faculty – programme-wise information

BSc. Food Science and Nutrition	100%
MSc. Foods and Nutrition	48%
Advanced Diploma ( Post PG ) in Food and Health Security	75%
Ph.D.	Nil

14. Programme-wise Student Teacher Ratio :

BSc. Food Science and Nutrition	10:1
MSc. Foods and Nutrition	40:3
Advanced Diploma ( Post PG ) in Food and Health Security	25:3
Ph.D.	3:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual :

Designation	Sanctioned	Filled	Actual
Lab Assistant	1	1	1
Lab Boy	-	-	-
Storekeeper (LDC)	1	1	1
IV Class	1	1	1

16. Research thrust areas as recognized by major funding agencies

- Clinical and Therapeutic Nutrition
- Assessment of Nutritional Status
- Community Nutrition

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. :

S. No.	Title	Agency	Period	Grant/Amount Mobilized (Rs. lakh)
1	UGC Innovative Programme to promote Inter disciplinary Teaching Research in Emerging Areas of Education <b>Course Coordinator.: Prof. G. Kalsi. Kohli</b> <b>Course Co-ordinator: Dr. Ritu Mathur</b>	University Grant Commission Bahadur Shah ZafarMarg New Delhi	April 2007 - March 2012	Rs. 32 lakh+ Post of 1 Assistant Professor
2	<b>Major Research Project</b> <b>Principal Investigator- Dr. Bharti Jain</b> SOYABEAN: Processing and Analysis of proximate principles and acceptability appraisal of food products developed from different varieties cultivated in Rajasthan	University Grant Commission Bahadur Shah ZafarMarg New Delhi	April 2007 - March 2010	Rs.5,94,400/-
3	<b>Major Research Project</b> <b>Principal Investigator- Dr. Ritu Mathur</b> "Nutritional Screening, Prediction and Assessment of Risk Factors in Adults aged 30-60 Years and in Patients Suffering from Cardio Vascular Diseases with Special reference to Diet, Life Style Modification and Impact of Intervention with Coenzyme Q – 10 supplementation" of 3 years duration (2010-13)	University Grant Commission Bahadur Shah ZafarMarg, New Delhi	Jan. 2010 - May 2013	9.598 + Revised Fellowship

18. Inter-institutional collaborative projects and associated grants received : Nil

a) National collaboration

b) International collaboration

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. Detail mentioned in point 17

20. Research facility / centre with : Nil

- state recognition
- national recognition
- international recognition

21. Special research laboratories sponsored by / created by industry or corporate bodies : Nil

22. Publications:

\* Number of papers published in peer reviewed journals (national / international) : Detail List enclosed- **Appendix I**

Name of Faculty	International+National= Total	Last five years: (International + National)
Prof. G. Kalsi Kohli	3 +8 = 11	4+0 = 4
Prof. Bharti Jain	20+12=32	15+0=15
Prof. Ritu Mathur	11+9= 20	6+3=9

- \* Monographs: Nil
- \* Chapters in Books: Nil
- \* Edited Books Nil
- \* Books with ISBN with details of publishers

Books Published			
S. No.	Title with Publisher	Type of Book & Authorship	ISSN/ISBN No
1	Human Development: Capability Poverty-Assessment and its relationship with income Poverty. Scientific Publishers (India) Jodhpur.	Reference Book Jain, Rajendra Kumar and <b>Jain Bharti</b> (2008)	978-81-7233-544-1
2	Pregnancy Induced Hypertension: Maternal Risks and Perinatal Outcome. University Book House (Pvt.) Ltd. Jaipur, India.	Reference Book <b>Jain, Bharti and Mathur Kirti</b> (2010)	978-81-8198-274-2

- \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): not known
- \* Citation Index – range / average
- \* SNIP
- \* SJR
- \* Impact Factor – range / average
- \* h-index – Given in Appendix I

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated :Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad: Nil

26. Faculty serving in

- a) National committees
- Expert Selection Committee in RPSC, RBSE
  - Evaluator in State level examinations of RPSC, RBSE
  - Assisted in paper setting of own University and other Universities of the state and outside the state
  - Member curriculum design and development of own University and other Universities, RPSC, RBSE
  - Expert Selection Committee in MPPSC
  - Member of Board of studies of state university

- b) International committees : Nil  
 c) Editorial Boards :

Name of Faculty	Name of the Journal	National/ International
<b>Prof. G. Kalsi Kohli</b>	Asian Journal of Home Science International Journal of Food , Nutrition and Dietetics	International
<b>Prof. Bharti Jain</b>	Asian Journal of Home Science Food Science Research Journal Research and Reviews : Journal of Food Science and Technology	International
<b>Prof. Ritu Mathur</b>	Asian Journal of Home Science International Journal of Nutritional Sciences	International

- d) any other (please specify) :Peer reviewing of articles published in International referred indexed research journal

Name of Faculty	Name of the Journal	National/International
<b>Prof. G. Kalsi Kohli</b>	Asian Journal of Home Science International Journal of Food, Nutrition and Dietetics	National International
<b>Prof. Bharti Jain</b>	Research and Reviews: Journal of Food Science and Technology, Food Science Research Journal IIS University Journal	International International National
<b>Prof. Ritu Mathur</b>	Journal of Science of food and Agriculture Journal of Clinical trials in cardiology Asian Journal of Home Science	International International National

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). List enclosed- Appendix II
28. Student projects
- percentage of students who have done in-house projects including inter-departmental projects : 90 Per cent
  - percentage of students doing projects in collaboration with other universities/industry / institute : 10 Per cent
29. Awards/recognitions received at the national and international level by
- Faculty

Name of Faculty	
<b>Prof. G. Kalsi Kohli</b>	<ul style="list-style-type: none"> <li>Registered Dietician By Dietetic Association of India</li> <li>Convenor, Nutrition Society of India, Ajmer Chapter</li> <li>Fellow of Hind Agri-horticultural Society (FHAS)</li> <li>Received Best poster paper presentation award entitled Household Food and Nutrition Security among Agricultural Labourers of Ajmer City, at CFTRI, Mysore.</li> </ul>
<b>Prof. Bharti Jain</b>	<ul style="list-style-type: none"> <li>Received first Best oral paper presentation award entitled "Medicinal and Therapeutic uses of Green Food Triticumaestium" in National level seminar on Recent Advances in Botany, organized by DAV College, Ajmer <b>(2012)</b></li> <li>Received Second Best oral paper presentation award entitled (2016): Assessment of Impact of Nutrition Education on Nutrient Intake of Type II Diabetics in two days National Conference on "Prevention and Management of Non Communicable Diseases " held from 8<sup>th</sup>-9<sup>th</sup> January 2016 at IIS University Jaipur, Rajasthan and presented a Paper entitled "(2016):</li> </ul>
<b>Prof. Ritu Mathur</b>	<ul style="list-style-type: none"> <li>Received Gold Medal for securing first position in BSc. Home Science, University of Rajasthan, Jaipur</li> <li>Received Maya Devi Grover Memorial Award (Gold Medal) for securing first position in MSc Foods and Nutrition and in the combined faculty of Home Science, University of Rajasthan, Jaipur</li> <li>Qualified UGC NET exam in 1990 and received JRF and SRF for pursuing research leading to Ph. D. degree</li> <li><i>Paper awarded the Best Oral Award</i> entitled "<i>Stevia Rebaudiana- A Miracle Herb</i> "-Nutrient Composition and its Anti-hyperglycemic effect on Type II Diabetes Mellitus Patients presented in a three days International Conference on "Multi-disciplinary approaches to Diabetes Research &amp; Health" from 14<sup>th</sup>-16<sup>th</sup> November, 2010 organized by Dept of Zoology, University of Rajasthan Jaipur and S.K Govt College Sikar Rajasthan.</li> <li>Fellow of Hind Agri-horticultural Society (FHAS)</li> </ul>

- Doctoral / post-doctoral fellows
  - Students : **An alumni of the Department Dr. Sarla Lakhawat is a recipient of National Award by the President of India**
30. Seminars/ Conferences/Workshops organized and the source of funding (national /International) with details of outstanding participants, if any. List enclosed- Appendix III
  31. Code of ethics for research followed by the departments : List enclosed Appendix IV
  32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
<b>BSc. Food Science and Nutrition</b>	20	1	3	Appear ed	Appeared
<b>M.Sc. Foods and Nutrition (last 5 years)</b>	40 (Average)	-	20	-	100%
<b>Advanced (Post PG ) Diploma in Food and Health Security</b>	45 (Average)	18 (Average)	7 (Average)	100%	100%
<b>Ph.D. (Research Entrance Test of the University held in 2010 and 2011)</b>	20 (Average)	-	10 (Average)		100%

## 33. Diversity of Students

Name of the Programme (Average of last 5 years)	% of students from the same university	% of students from other universities within the state	% of students from universities outside the state	% of students from other countries
BSc. Food Science and Nutrition *Eligibility to this programme is 10+2	Nil*	Nil*	Nil*	Nil
MSc. Foods and Nutrition	80	10	10	Nil
Advanced Diploma (Post PG) in Food and Health Security	85	10	05	Nil
Ph.D.	60	25	15	Nil

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. List enclosed- Appendix V

## 35. Student progression

Student progression	Percentage against enrolled	
<b>UG to PG</b>	Not applicable	
<b>PG to M.Phil.</b>	2%	
<b>PG to Ph.D.</b>	11%	
<b>Ph.D. to Post-Doctoral</b>	Nil	
<b>Employed</b>	Campus selection	Nil
	Other than campus recruitment	65%
<b>Entrepreneurs</b>	20%	

**Alumni profile of the department:** List enclosed- Appendix VI

## 36. Diversity of staff

Percentage of faculty who are Graduates	
<b>Of the same university</b>	Nil
<b>From other universities within the state</b>	66%
<b>From Universities from other states</b>	33%
<b>From universities outside of the country</b>	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : Nil
38. Present details of departmental infrastructural facilities with regard to
- Library : 100 books
  - Internet facilities for staff and students : for staff
  - Total number of class rooms : four + two labs cum classrooms
  - Class rooms with ICT facility :One
  - Students' laboratories : Two
  - Research laboratories: one
39. List of doctoral, post-doctoral students and Research Associates
- from the host institution/university : List enclosed- Appendix VII
  - from other institutions/universities
40. Number of post graduate students getting financial assistance from the university.:
- Professional Faculty Fund Scholarship:  
 One in M.Sc. Previous,  
 One in Final and  
 One in Advanced Diploma in Food and Health Security.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
- Yes, review of UGC Model Curriculum and review on the internet to assess the scope of Professional Courses in Food Science and Nutrition, this led to the initiation of the BSc. Food Science and Nutrition Programme in the department.
42. Does the department obtain feedback from
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?  
 Yes the feedback is utilised in improving teaching pedagogy , in initiating new professional courses and in updating the curriculum.
  - Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?  
 Yes the feedback is utilised in continuously improving teaching techniques.

- c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

Yes the feedback is utilised in incorporating issues in nutrition to meet the demands of the Society and in keeping up with the recent trends in this field.

43. List the distinguished alumni of the department (maximum 10)

1	<b>Dr. Sarla Lakhawat</b>	Assoc. Prof. MPUAT,
2	<b>Dr. Sister Pearl D Souza</b>	Vice Principal, Sophia Girls College Ajmer
3	<b>Dr. Nandini Johri</b>	Assistant Professor, DayalBaghUniversity,Agra
4	<b>Dr. Vinita Rai</b>	Dietician , Mittal Hospital and Research Center , Ajmer
5	<b>Dr. Renuka Sharma</b>	Principal , DAB College, Beawar, Dist. Ajmer
6	<b>Dr. Barkha Bhatnagar</b>	Assistant Professor, ManavRachna International College, Faridabad
7	<b>Mrs. Ruchi Mathur</b>	Lecturer ,SRKP Girls College, Kishangarh
8	<b>Mrs. Shweta Singh</b>	Lecturer , Sophia Girls College, Ajmer
9	<b>Dr. Jaya Benjamin</b>	Assistant Professor, Institute of Liver and Biliary Sciences, New Delhi
10	<b>Dr. Navita Srivastav</b>	Senior Lecturer, Govt. College, Sarwad, Rajasthan
11	<b>Preeti Nahar</b>	Senior Dietician in US

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

S. No.	Programme	Duration From	To	Organised by
1	Workshop on Food Preservation	29 <sup>th</sup> Aug.2005	3 <sup>rd</sup> Sept. 2005	Centre for ESBM and Department of Foods and Nutrition, MDS University, Ajmer
2	Refresher Course in Home Science	5 <sup>th</sup> Sep. 2006	25 <sup>th</sup> Sept. 2006	UGC Academic Staff College & Foods & Nutrition Dept., MDS University, Ajmer
3	Entrepreneurship and Skill Development Programme on Bakery Products	28 <sup>th</sup> February 2012	30 <sup>th</sup> March 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer
4	Workshop on Food Preservation	8 <sup>th</sup> Oct. 2012	13 <sup>th</sup> Oct. 2012	Department of Food Science and Nutrition , MDS University, Ajmer
5	Participated in Workshop on Algae Cultivation and Biofuel Production	26 <sup>th</sup> July, 2013	31 <sup>st</sup> July 2013	Algae Biofuel and Biomolecules Centre, and Academic Staff College MDS University, Ajmer
6.	World Breast Feeding Week	1 <sup>st</sup> -8 <sup>th</sup> August Each year	1 <sup>st</sup> -8 <sup>th</sup> August Each year	Department of Food Science and Nutrition , MDS University, Ajmer

7	National Nutrition Week	1 <sup>st</sup> -7 <sup>th</sup> September Each year	1 <sup>st</sup> -7 <sup>th</sup> September Each year	Department of Food Science and Nutrition , MDS University, Ajmer
8	Extension Lectures on recent issues of health and Nutrition by various subject Experts			Department of Food Science and Nutrition , MDS University, Ajmer Prof. Sheel Sharma Prof. G.N. Mathur Prof. Maya Chowdhary Prof. Shashi Jain Prof. G.S. Toteja Prof. UmeshKapil Prof. AnuradhaGoyle Prof. Anju Gupta

45. List the teaching methods adopted by the faculty for different programmes.

1. Power point presentations
2. Traditional chalk-board
3. Seminar
4. Student seminars to develop presentation skills
5. Library
6. Dissertation - Research project in third and fourth semester
7. Field Visits- to Food Processing Industries, to local Anganwadi Centres, to Institutional Kitchens, Dairy, Grainery, Mid-Day Meal Centres, Food Craft Institute, KrishiVigyan Kendra, National Seed and Spice Research Institute, nearby villages to assess Nutritional Status and impart Nutrition education

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

**Mission to spread the message of the importance of Nutrition in achieving good health and improving the Quality of life.**

**Strategies to fulfil the motto and mission:**

- Emphasis on updates in recent developments in the subject
- Compulsory Internship of minimum 6 weeks in a teaching Dietetics Department of any Hospital/Institute such as AIIMS New Delhi, PGI Lucknow and Chandigarh, Fortis, Escorts, Fortis etc.
- Student Seminars, assignments, group discussions, extension lectures.
- Social responsibility: Imparting Nutrition Education to school children and in nearby rural communities
- Developing Research Potential in students: regular Ph.D. course work classes with emphasis on Research Methodology, Computer Applications, Literature review, Synopsis writing, Research Report writing, preparing proposals for seeking financial assistance and grants and stress on current trends in Nutrition, too work towards meeting the goals of the mission.
- Laboratory Management Skills – students are assigned duties for the maintenance and upkeep of instruments and labs.

47. Highlight the participation of students and faculty in extension activities.

- a. Regular **NSS camps are organised in the which participation of the students is compulsory.** They are encouraged to participate in the campus cleaning activities, **blood**

**donation camps. Spreading nutritional awareness** through posters, lectures and house to house visits

- b. **Lectures in the NSS camps:** Faculty has been invited to deliver lectures on health, hygiene, and nutrition, ways to combat nutritional deficiency diseases, ways to prevent and manage Non communicable diseases like Cancer, obesity, Diabetes, Cardio vascular diseases, renal and liver disease, bone health, dental health etc. in NSS camps.

48. Give details of “beyond syllabus scholarly activities” of the department.:



1. Celebration of National Nutrition week
2. Fruit and Vegetable Preservation course
3. Bakery Course
4. Participation in student seminars, workshops, training etc.

5. Workshops and training programs.

6. Workshops and training programs



49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details: NA

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

1	Research Projects have generated new facts such as Nutritional composition and trypsin inhibitor in different varieties of Soybean grown in Rajasthan and Developing value added products from them.
2	Knowledge regarding the beneficial role of the anti-oxidant Coenzyme Q10 in cardiovascular diseases.
3	Discovering new emerging risk factors for predicting heart diseases in later life.
4	Soy isoflavones for seeking relief from pre and post-menopausal symptoms
5	The role of <i>Stevia rebaudiana</i> as a sweetener substitute for diabetics and its therapeutic properties.
6	Generating new facts regarding the role of stress and dietary factors in the aetiology of Acid Peptic Disease
7	Product development with <i>Stevia rebaudiana</i>
8	Management of Pregnancy Induced Hypertension
9	Management of Anaemia
10	Management of Diabetes through Nutrition Education and product development (buns, biscuits, <i>mathri</i> , <i>idli</i> , <i>chappati</i> ) using traditional hypoglycaemic agents such as fenugreek seeds, <i>jamun</i> seeds, bitter gourd and guar gum powder.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Major Strengths	<p><b>Course design</b> BSc, MSc and Advanced ( Post PG ) Diploma in Food and Health Security</p> <p><b>Learning by Doing</b></p> <p><b>Professional aspect in</b> every academic programme</p> <p><b>Excellent placements</b></p> <p>Research conducted at the Department faculty members receive National and International recognition</p> <p>Chapter of <b>Nutrition Society of India</b></p>
Weaknesses	<p>Lack of Faculty</p> <p>Difficult handling of specializations other than those of the three permanent faculty members</p> <p>Time constraint does not allow sufficient time to the faculty for publication and preparing grant proposals that affects external funding.</p> <p>Lack of funds for maintenance of instruments</p> <p>Lack of grants to purchase high tech instruments for research purposes</p>
Opportunities	<p>Health sector deserves the greatest attention</p> <p>Nutrition has a major role to play in the prevention and treatment of chronic degenerative diseases</p> <p>Health and Nutrition are closely inter related and have a direct impact on the Nation's growth and development</p> <p>Nutrition is a field which influences mankind and quality of one's life right from foetal life, during the entire life span and up to death.</p>
Challenges	<p>There is now super specialisation in every area of Nutrition such as Biochemistry, Food Science, Public Health, Clinical and Therapeutic Nutrition</p> <p>Each opportunity is a challenge looking to the growing number of health and malnutrition cases.</p> <p>India is known as the Diabetic Capital of the world. The ever increasing number of heart disease patients, cancer and diabetic patients is a challenge.</p> <p>Malnutrition and Anaemia are issues which we have been to striving to combat for several decades now but still remain a challenge before us.</p>

52. Future plans of the department.

1	Establishing specialised labs for Sensory Evaluation, Food Analysis, Food Microbiology, and Institutional Food Administration.
2	Establishing a Diet Counselling Centre
3	Launching new Academic Programmes for specialised researches in the field of Nutrition
4	Submitting new Research Projects for seeking financial assistance to different funding agencies.
5	Academic collaborations with National agencies like ICMR, Krishi Vigyan Kendra, AIIMS, NIN, CFTRI etc.

## APPENDIX I

### PUBLICATIONS BY THE FACULTY

#### PAPERS PUBLISHED: DR. G. KALSI KOHLI

1. **Kalsi, G. K.** (1985) Organoleptic Studies on Ice cream Recipes Prepared with Substituted Vegetable Fats for Butter Fat to Reduce Cost and Cholesterol. *Sophiana* 1984-1985. page 17.
2. Sharma, K.K., **Kalsi, G.K.** (1988). Dietary Fat and Energy Intake in Punjab. Proceedings of the National Seminar on 'Strategies for making India self-reliant in vegetable oils. Indian Society of Oilseeds Research, Directorate of Oilseeds Research
3. **Kalsi, G.K.** and Sharma, K.K. (1990). Relation Between Fat Pattern, Energy Intake and Risk Factors in Obese and Normal Women. *Chintak A Research Journal of MDS University* (1997) 1 (1), page 73
4. Arora, P., Jain B., **Kohli G.Kalsi.**, Sehgal, M., Goyal, R.K. (2002). Dyslipidaemia in type 2 Diabetes Mellitus. *Indian Medical Gazette.* (CXXXVI) (7), 258-26.
5. Arora, P., **Kohli G.Kalsi**, Jain B., Sehgal, M., Goyal, R.K.(2002) Nutritional Assessment in Type 2 Diabetes Mellitus and Dietary Recommendations. . *Current Medical Trends.*6 (4) 1254 – 63.
6. **Kohli, G. Kalsi**, Maheshwari, M., Baid, J.C.(2002) Pattern of Gall Bladder Diseases in Diabetes. (2002). *The Antiseptic.* 100 (4), 137-138.
7. Tyagi. **Kohli G.Kalsi**, Maheshwari, M., Baid, J.C. Risk Factors for Gall Stones Diseases – Revisited, (2002). *The Indian Practitioner* 56 (2) 93-96.
8. Moyal Namita S; **Kohli, G. Kalsi**; Singh S D (2012) Food Insecurity and nutritional consequences in elderly males (60-80 Years) in Ajmer City; *Asian Journal of Home Science*, Vol. 7, Issue 2, Dec 2012, 556-563.
9. Singh S D; Phagna Anant; **Kohli, G. Kalsi** (2014) Pubic Distribution system in Rajasthan; *International Journal of Food, Nutrition and Dietetics*, Vol. 2, No. 2, May-Aug 2014.
10. Devi A Jayanti; **Kohli, G. Kalsi** (2015) Efficacy of exercise and diet based lifestyle modification program on management of body weight in Type-ii Diabetes Mellitus patients; *IJAPRR International Journal*, Vol.II, Issue XII, p. n. 12-17, Dec, 2015
11. Devi A Jayanti; **Kohli, G. Kalsi** (2015) Efficacy of Yoga, diet and exercise based lifestyle modification program on adjustment of Body Mass Index in Type-ii Diabetes Mellitus; *IJAPRR International Journal*, Vol.II, Issue XII, p. n. 18-24, Dec, 2015

#### Research Papers Presented at National and International Conferences & Seminars and /or Abstracts Published

1. **Kalsi,G.K.** (1985). Organoleptic Studies on Ice Cream Recipes Prepared with Substituted Vegetable Fats for Butter Fat to Reduce Cost and Cholesterol. Abstract Poster Session, 3.02 ICFOST'85.
2. Sharma, K.K., **Kalsi, G.K.** (1988). Dietary Fat and Energy Intake InPunjab. National Seminar on 'Strategies for making India self-reliant in vegetable oils. 1988. Abstract, Indian Society of Oilseeds Research, ICAR page 120, detailed paper in the proceedings of the seminar.
3. **Kalsi, G.K.**, Sharma, K.K. and Kataria, P. (1989). Resting Metabolic Rate of Obese and Normal Punjabi Women. Abstracts. P5.63 The 14th International congress of Nutrition. SeoulKorea, 1989.
4. **Kalsi, G.K.** and Sharma, K.K. (1989). Anthropometry and Energy Intake of Obese and Normal Punjabi women. Scientific Programme and Abstracts. Indian Dietetic Association XXII Annual convention NIN, Hyderabad. 1989.
5. **Kalsi, G.K.** and Sharma, K.K. (1990). Relation between Fat Pattern, Energy Intake and Risk Factors in Obese and Normal Women - Presented in **Award Session** at Nutrition Society of India's Silver jubilee celebrations at National Institute of Nutrition, Hyderabad. Received **Certificate of Appreciation**. Scientific Programme and Abstracts. Awards CNS-4 NSI XXIII Annual meeting,
6. **Kalsi, G.K.** and Sharma, K.K. (1990) Cardiovascular Risk Factors in Obese Punjabi Women. 2nd International congress on Cardiovascular Nutrition and Coronary Heart Diseases, New Delhi.
7. **Kalsi, G.K.** and Sharma, K.K. (1991). Relation between Obesity, Food Habits, Energy Expenditure Pattern and Health of Punjabi Women. Presented in the **Award Session** of XXIII Annual convention of Indian Dietetic Association. Scientific Programme and Abstracts. IDA XXIII Annual convention. 1991.

8. **Kalsi, G.K.** Curriculum Development in Home Science: Problems and Remedies. Presented in National Seminar on, 'Role of University in the Development of Affiliated Colleges'. MDSUniversity, Ajmer (Feb. 14-16, 1997).
9. **Kalsi, G.K.**, Raju, L. &Gangwar, G. (1997). Working Pattern and Sanitary Conditions of Commercial Food Service Centres of Pushkar Valley Abstracts, page 90. National Conference on Environment and Eco-development of PushkarValley. M D S University, Ajmer.
10. **Kalsi, G.K.** and Dodani, A. (1998). Nutritional Status and Energy Expenditure Pattern of Obese Sindhi Women of TheAjmerCity. Scientific Programme and Abstracts PSCN15 page 47, XXXI Annual meeting Nutrition Society of India, National Institute of Nutrition, Hyderabad.
11. **Kalsi, G.K.** (1998). Food Policy of India. Presented in National Seminar on Indian Economy: Performance, Challenges & Alternatives. MDSUniversity, Ajmer (Jan. 7-9, 1998).
12. **Kalsi, G.K.** (1999). Profile of Micronutrient Deficiency Disorders in Eastern Rajasthan. Presented in National seminar on Micronutrients in Human Health-Recent Advances. MDSUniversity, Ajmer (Feb. 25-26, 1999).
13. **Kalsi, G.K.** and Gangwar (1999). Working Patterns and Sanitary Conditions of Commercial Food Service Centers of AjmerCity. Abstracts and Souvenir, page 45. XXXII Annual Convention of Indian Dietetic Association. Oct. 14-15, 1999.
14. **Kalsi, G.K.** and Tewari R. (1999). Gender Bias in Relation to Nutrition among the Pre-adolescents of Rural Ajmer. XXXII Annual Meeting - Scientific Programme and Abstracts. CNP-13, page 59. Nutrition Society of India. Nov. 25-26, 1999.
15. **Kalsi, G.K.** and Jethani, P. (1999). Nutritional Profile of Male Athletes (11-16 Years) Undergoing National Level Training for Table Tennis. Programme and Abstracts, page 33, Indian Sports Medicine Congress, '99'.
16. Kumawat, N; Mathur, R; **Kohli, G. Kalsi.** (2003). Impact of Green Leafy Vegetable Powder (Alone and in Combination with Ascorbic Acid) in Prevention of Anaemia in Young Women. Abstracts PFC8-08 page 220. IX Asian Congress of Nutrition: Nutrition Goals for Asia – Vision 2020. Federation of Asian Nutrition Societies, Nutrition Society of India, and Nutrition Foundation of India, New Delhi.
17. **Kohli, G. Kalsi.**, Gupta, A (2003) Effect of Nutrition Education on Dietary Intake, Maternal Weight Gain and Perinatal Outcome of Pregnant Women. Scientific Programme and Abstracts OPCN06, page 38,XXXV Annual Meeting of Nutrition Society of India, NIN, Hyderabad
18. Benjamin, J. **Kohli, G. Kalsi**, Jain, B. (2003) Effect of Menopausal status on the anthropometric parameters of Fat Distribution and Cardiovascular Risk Factors. Scientific Programme and Abstracts PSCN07, page 44,XXXV Annual Meeting of Nutrition Society of India, NIN, Hyderabad
19. Gupta Ankita**Kohli, G. Kalsi** (2007) Effect of feeding Soybean ( Glycine max) on Serum Lipid profile of menopausal Women; 13<sup>th</sup> Annual Conference of The Indian Society for parenteral and enteral nutrition ; Dept. of Gastroenterology and Human Nutrition, AIIMS, New Delhi
20. KumawatNisha**Kohli, G. Kalsi** (2007) NSI
21. Chauhan, A; Moyal N S ; Singh S D; **Kohli, G. Kalsi** (2007)Household Food and Nutrition Security among Agricultural Labourers of Ajmer City, 77<sup>th</sup> Annual Session of National Academy of Sciences, India; on 'Novel Approaches for Food and Nutritional Security', organized by CFTRI, Mysore, December 6-8, 2007
22. Jindal Shikha ;**Kohli, G. Kalsi**; Singh S D (2007) Nutrition Labeling as a Source of Nutrition Information and Heal claim of Food Products , 77th Annual Session of National Academy of Sciences, India; on 'Noval Approaches for Food and Nutritional Security', organized by CFTRI, Mysore, December 6-8, 2007
23. Karnawat, B S; Karnawat D.,**Kohli,G K** (2014) Knowledge, Attitude and Practices about Infant Feeding among Mothers of Urban and Rural Areas of Ajmer District; 2<sup>nd</sup> International workshop on Micronutrients and Child Health (November 3-7, 2014, organized by AIIMS, New Delhi
24. D'souza P; **Kohli,G K** (2014) Impact of Iron acid supplementation on the mental performance of urban adolescent girls (16-18 years); 2<sup>nd</sup> International workshop on Micronutrients and Child Health (November 3-7, 2014, organized by AIIMS, New Delhi
25. Sharma Renuka; **Kohli, G. Kalsi** (2015) Risk Factors of Chronic Degenerative Diseases in residents of Beawar with special reference to Coronary Heart Disease in adult men (30-60 years); Rajasthan Conclave 3, Dec 13-14, 2015, DMRC (ICMR) Jodhpur

26. Devi A Jayanti; **Kohli, G. Kalsi** (2015) Efficacy of Yoga and diet based lifestyle modification program in the control of blood pressure on type-ii Diabetes mellitus; Rajasthan Conclave 3, Dec 13-14, 2015, DMRC (ICMR) Jodhpur
27. MathurShalini; MathurRitu; **Kohli, G. Kalsi**; MoyalNamita(2015) Assessment of Nutritional Status of Anemic women and Impact of Intervention with Wheat Grass Juice; Rajasthan Conclave 3, Dec 13-14, 2015, DMRC (ICMR) Jodhpur
28. Chouhan Namrata; **Kohli, G. Kalsi** (2015) Assessment of food security among the urban households on the basis of food consumption pattern; Rajasthan Conclave 3, Dec 13-14, 2015, DMRC (ICMR) Jodhpur
29. Mathur Shalini; MathurRitu; **Kohli, G. Kalsi**; MoyalNamita(2016) Impact of Intervention with Wheat grass juice on Anemic Women ; 31<sup>st</sup> Biennial National Conference of HSAI, UAS, Dharwad, Karnataka
30. Lakhotia Garima; **Kohli, G. Kalsi** (2016) Fast food consumption among adolescents in Rajasthan; 31<sup>st</sup> Biennial National Conference of HSAI, UAS, Dharwad, Karnataka
31. Massey Akanksha; Mathur Ritu; **Kohli, G. Kalsi**; MoyalNamita S(2016) Assessment of Health, Nutritional Status and Dietary Habits of Women suffering from Hypothyroidism aged 18-54 years in Ajmer City; National Conference on Prevention and management of Non communicable Diseases, 8-9 Jan 2016, IIS University, Jaipur
32. Sharma Renuka; **Kohli, G. Kalsi** (2016) Risk factors of Chronic degenerative diseases in adult men (30-60 years) in residents of Beawar; National Conference on Prevention and management of Non communicable Diseases, 8-9 Jan 2016, IIS University, Jaipur
33. Chouhan Abhilasha; **Kohli, G. Kalsi**; Moyal Namita S(2016) Status of food and Health Security among laborer's residing in Rural areas in Ajmer District; National Conference on Prevention and management of Non communicable Diseases, 8-9 Jan 2016, IIS University, Jaipur

#### PAPERS PUBLISHED: DR. BHARTI JAIN

Research Papers Published in International and National Journals				
S. No	TITLE OF PAPER WITH PAGE NUMBER	JOURNAL (Academic Session)	ISSN / SSBN No.	I/N
1.	Pareek Alka and <b>Jain Bharti</b> (1994): Study of the Dietary Impact on Occurrence of Fluorosis. The Ind. J. Nutr. Dietet. 31 pp 344-353	The Indian Journal of Nutrition and Dietetics Jan.1999	0022-3174	N
2.	<b>Jain, Bharti</b> (1999): Unchecked Menace of Fluorosis: An Epidemiological, Clinical and Dietary study of Rajasthan Villages. Rural India. 62 pp. 5-12	<b>Rural India</b>		<b>N</b>
3.	<b>Jain, Bharti</b> and Chaudhary, Maya (1999): History of Fluorosis and their Awareness: A Study in Endemic Areas of Tonk District, Rajasthan.	Proceedings of National Seminar on Fluoride Contamination, Fluorosis and Defluoridation Techniques (Environ & Health '99) pp. 53-59.		<b>N</b>
4.	<b>Jain, Bharti</b> and Chaudhary, Maya (1999): An Epidemiological, Clinical and Dietary study of Fluorosis in Sawaimadhopur District of Rajasthan.	Proceedings of National Seminar on Fluoride Contamination, Fluorosis and Defluoridation Techniques (Environ & Health '99) pp. 58-62.		<b>N</b>
5.	Jain, R.K. and <b>Jain, Bharti</b> (2000): Capability Poverty in Rajasthan: Not Very Encouraging. The Economic Challenger. 2:6, pp. 53-57.	<b>The Economic Challenger March, 2000</b>		<b>N</b>

6.	Arora, Priyanka, <b>Jain, Bharti</b> , Kohli, G.K., Sehgal, Meenal and Goyal, R. (2002): Dyslipidaemia in Type 2 Diabetes Mellitus. 136:7 pp 258-263. Indian Medical Gazette	<b>Indian Medical Gazette</b> July 2002	0019-5863	N
7.	Arora, Priyanka, Kohli, G.Kalsi., <b>Jain, Bharti</b> , Sehgal, Meenal and Goyal, R.K (2002): Nutritional Assessment in Type 2 Diabetics and Dietary Recommendations. Current Medical trends. 6:4pp.1254-1263	<b>Current Medical trends</b> Official Journal of all India Medicos Society December 2002	0972-3390	N
8.	<b>Jain, Bharti</b> (2004): Jeevan Ka Aadhar Shakahar ,Shakahar Kranti. July-August, 15(3-4),pp 19-22.	<b>Shakahar Kranti.</b> August 2004	RNI50221/87 IDC/MP/426/ 2004	N
9.	Mathur, Kirtiand <b>Jain Bharti</b> , (2004): Diet Counselling in Renal Patients. Proceedings of 37 <sup>th</sup> Annual National Convention of Indian Dietetics Association, pp. 69-71	37 <sup>th</sup> Annual National Convention of Indian Dietetics Association Organized by All India Institute of Medical sciences, New Delhi on 8 <sup>th</sup> and 9 <sup>th</sup> October, 2004		N
10.	<b>Jain, Bharti</b> and Saxena, Ravindra. (2004): An assessment of knowledge, awareness and background history of fluorotics in endemic areas of Tonk district (Rajasthan). Vol. 23 (4): 701-706pp	<b>Pollution Research- Environmedia</b> October -December 2004	0257-8050	I
11.	<b>Jain, Bharti</b> and Saxena, Ravindra. (2005): <i>Endemic Fluorosis in Rajasthan. A study of Dietary Factors involved in Dental &amp; Skeletal Fluorosis.</i> Anusandhan -An Innovative Research Journal of Natural Sciences, MDS University, Ajmer.	<b>An Innovative Research Journal of Natural Sciences</b> , MDS University, Ajmer March, 2005		N
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15.	<b>Jain, Bharti</b> and Jain Namrata (2010): Quantitative analysis of proximate principles and trypsin inhibitor in mature and processed	<b>Asian Journal of Home Science</b> June 2010	0973-4732 Online-0976-8351	I

	Indian soybean genotype. Asian Journal of Home Science. Vol.5(1) pp.123-127			
16.	<b>Jain, Bharti</b> and KhangarotAlpana (2010): Sensory and Nutritional Assessment of Soya Value Added Traditional Products from Rajasthan. Food Sci. Res.J. 1(2): 213-217	<b>Food Science Research Journal</b> October 2010	0976-1276 Online:2230-9403	I
17.	<b>Jain, Bharti</b> and Mathur Puja (2010) :Quality Evaluation of Milk Sold in Ajmer City.. Asian Jr. of Microbiol. Biotch. Env. Sc. Vol.12, (4): 1-4.	<b>Asian Journal of Microbiology, Biotechnology and Environmental Sciences (AJMBES)</b> December 2010	0972-3005	I
18.	<b>Jain, Bharti</b> and KuveraDivya (2011): Impact of nutrition education and andcounseling on change in dietary habits and behavior of middle aged diabetics. Asian Journal of Home Science. Vol.6(2) pp.	<b>Asian Journal of Home Science</b> December 2011	0973-4732 Online-0976-8351  NAAS Rating -3.1	I
19.	<b>Jain Bharti</b> ;Saraswat B.P. and Jain R. K.(2011): Entrepreneurship development through soybean processing and value addition for upcoming entrepreneurs. Vol.1(2) 72-77pp	<b>Entrepreneurship Business Review</b> December 2011	2229-7294	I
20.	<b>Jain Bharti</b> (2012).Sensory and nutritional quality evaluation of soy-bajra fortified sattu and ready to eat sattu products. Vol.3(1) 86-90pp	<b>Food Science Research Journal</b> April 2012	0976-1276 Online:2230-9403	I
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22.	<b>Jain, Bharti</b> and KuveraDivya (2012):Effect of nutrition counselling on anthropometry of middle aged type 2 diabetics. Vol.2(2) 18-29pp	<b>Research &amp; Reviews: A Journal of Health Professions</b> Dec. 2012	Online:2277-6192	I
23.	<b>Jain, Bharti</b> and KuveraDivya (2013): Effect of nutritional counselling on glucose level of middle aged non- insulin dependent diabetics. Vol.7(2)472-478 pp.	<b>Asian Journal of Home Science</b> December 2012	0973-4732 Online-0976-8351 NAAS Rating -3.1	I
24.	<b>Jain, Bharti</b> (2013): Nutritional quality and sensory evaluation of value added soy baked products. Vol.2(1)36-41 pp	<b>Research and Reviews: Journal of Food Science and Technology</b> April 2013	2278-2249	I
25.	<b>Jain, Bharti</b> and KuveraDivya (2013): Development and Organoleptic Evaluation of Baked Products Incorporated with Selected	<b>Indian Journal of Ancient Medicine and Yoga</b>	pISSN 0975-6986 eISSN 0974-	I

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26.	<b>Jain, Bharti</b> and Rahman Nadia (2013) :Assessment of Iodine Deficiency Disorders among Children in Rural Areas of Ajmer District, Rajasthan. Vol.3(3) 1-5pp	<b>Research &amp; Reviews: A Journal of Health Professions</b>	Online:2277-6192	I
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31.	<b>Jain, Bharti</b> and KuveraDivya (2015): Evaluation of Organoleptic Values of Chapatti Incorporated with selected Natural Hypoglycemic Foods. Vol.4(1)1-4 pp	<b>Research and Reviews: Journal of Food Science and Technology</b>	2278-2249	I
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20. **Mathur Ritu** and Johari Nandini (2016) . Nutritional Composition of *Stevia Rebaudiana* – A sweet herb and its Hypoglycemic and Hypolipidaemic Effect on Patients with Non Insulin Dependent Diabetes Mellitus. Paper accepted for publication in the Journal of Science of Food and Agriculture Print **ISSN**: 0022-5142, Impact Factor 1.8.

## Google Scholar

Citation indices	All	Since 2011
Citations	221	93
h-index	4	3
i10-index	4	3

**APPENDIX II**  
**ORIENTATION & REFRESHER COURSES**

**Orientation & Refresher Course**  
**Prof. Gulraj Kalsi Kohli**

Name of the Course/Summer School	Place	Duration/ Dates	Sponsoring Agency
Workshop in Home Science to develop lessons for Open School	New Delhi	June, 18-24 '81	Central Board of Secondary Education
Training course in the 'Preservation of fruit and vegetables'	New Delhi	July, 16-31 '82	Food and Nutrition Board, Ministry of Agriculture ,GOI
workshop on "The Latest Problems of Foods and Nutrition in India", the	Ludhiana	Aug., 10-11' 88	ICAR/UNDP Dept. of Foods and Nutrition, Punjab Agricultural University, Ludhiana
Training course in Evaluation and Assessment	Hyderabad	May, 16-30 '90	All India Association for Christian Higher Education
Refresher course on 'Current Issues in Foods and Nutrition'	New Delhi	Dec., 16, '91 to Jan., 3 '92	UGC Institute of Home Economics, University of Delhi
National workshop on Professional writing	Baroda	Mar., 7-9 '96	Dept. of Home Science Extension and Communication, MS University, Baroda
Workshop to develop model question papers	Ajmer	Nov., 7-8 '97	MDSU, Ajmer

**REFRESHER COURSES ORGANISED**

Course	Organised By	Date	Contribution
Refresher Course in Home Science	UGC-ASC, MDS University, Ajmer	6 to 26 Dec, 2000	Course Coordinator
Refresher Course in Home Science	UGC-ASC, MDS University, Ajmer	1 to 21 Dec, 2004	Course Coordinator
Refresher Course in Home Science	UGC-ASC, MDS University, Ajmer	16 Sep to 6 Oct, 2006	Course Coordinator

**DR. BHARTI JAIN**

S. No.	Name of the Course/ Summer School	Place	From	To	Sponsoring agency
1	Refresher course in Home Science	LadyIrwinCollege, University of Delhi, New Delhi	26 <sup>th</sup> Dec. 1988	7 <sup>th</sup> Jan. 1989	UGC
2	Orientation Course	University of Rajasthan, Jaipur	8 <sup>th</sup> May 1989	3 <sup>rd</sup> June 1989	UGC
3	Computer Assisted Learning and Teaching (CALT)	Resource Centre for CALT, Banasthali Vidyapith	25 <sup>th</sup> June 1993	24 <sup>th</sup> July 1993	Resource Centre for CALT, Banasthali Vidyapith

4	Refresher Course in Environmental Studies	MDS University, Ajmer	23 <sup>rd</sup> March 1998	12 <sup>th</sup> April 1998	UGC
5	Refresher Course in Home Science	Jai Narayan Vyas University Jodhpur	18 <sup>th</sup> Jan. 2000	7 <sup>th</sup> Feb 2000	UGC

### **DR. RITU MATHUR**

1. Attended a UGC sponsored 4 weeks Orientation Course at the Academic Staff College University of Rajasthan, Jaipur from Sept. 10 - Oct 7, 1997.
2. Attended a UGC sponsored 3 weeks Refresher Course in Environment organised by the Department of Environmental studies and the Academic Staff College M.D.S.University , Ajmer from March 9th to 29th , 2004.
3. Attended a UGC sponsored 3 weeks Refresher Course in Home Science organised by the Department of Foods and Nutrition and the Academic Staff College M.D.S. University , Ajmer from 1st to 21st December 2004.

**APPENDIX III**  
**CONFERENCE/ SEMINAR/ WORKSHOPS ORGANISED AND ATTENDED BY**  
**FACULTY**

**DR. G. KALSI KOHLI**

<b>Name of the Seminars /Conferences/Symposia workshop, etc.</b>	<b>Name of Sponsoring Agency</b>	<b>Place</b>	<b>Date</b>	<b>Special Contribution</b>
National Seminar of Women Entrepreneurs	National Alliance of Young Entrepreneurs	New Delhi	Oct.27-29, 1976	Participation in Exhibition
XV Annual Meeting of Indian Dietetic Association	Indian Dietetic Association	Baroda	Jan. 9-10 ,1981	Helped in Organization
Workshop in Home Science to develop lessons for Open School,	Central Board of Secondary Education	New Delhi	June, 18-24,1981	Developed lessons
V Convention of Food Scientists and Technologists	AFST (I)	New Delhi	April, 3-5, 1985	Presentation at Poster Session
XIX Annual Conference of IDA on Diabetes mellitus and infant feeding	Indian Dietetic Association	New Delhi	Nov.20-22, 1986	
First World Congress on Clinical Nutrition	International College of Nutrition	New Delhi	Feb.27- March,3, 1988	
Workshop on "The latest problems of Foods and Nutrition in India"	ICAR/UNDP Dept. of Foods & Nutrition, PAU	Ludhiana	Aug.,10-12,1988	Actively participated in workshop sessions and presentation of recommendations
Strategies for making India self-reliant in vegetable oils	Indian Society of Oilseeds Research	Hyderabad	Sep. 5-9, 1988	Presented paper
Silver Jubilee Celebrations & XXIII annual meeting of , Nutrition Society of India	Nutrition society of India and National Institute of Nutrition	Hyderabad	Dec. 1-3 ,1990	Presented paper in the Young Scientist Awards session & received a certificate of appreciation
International Symposium on 'Recent Trends in Nutrition'	Nutrition Foundation of India.	New Delhi	Dec. 5-6 ,1990	
XXIII National Convention of Indian Dietetic Association	Indian Dietetic Association	Nagpur	Jan.10-11, 1991	Presented Paper in the J.N.Bose Memorial Award Session
XXI Biennial conference of Home Science Association Indian Dietetic Association	Home Science Association of India	Baroda	Dec.20-22, 1995	
National workshop on Professional writing	Dept. of Home Science Extension and Communication	Baroda	Mar. 7-9,1996	

	FHS, MS University			
National Congress on Health and Dietary Fats	Human Nutrition Unit, All India Institute of Medical Sciences	New Delhi	Oct. 29 ,1996	
XXIX Annual National Conference	Indian Dietetic Association & PAU Ludhiana	Ludhiana	Nov.27-29, 1996	
Role of University in the Development of Affiliated Colleges	MDS University	Ajmer	Feb.14-16, 1997	Presented paper
National Seminar on 'Evaluation & Assessment in Higher Education	MDS University	Ajmer	Aug. 30 to Sept. 1, 1997	Convener & Resource person
Workshop to develop model question papers	MDS University	Ajmer	Nov. 7-8, 1997	Convener for Home Science
National Seminar with International Participation on Environment & Eco-development of Pushkar Valley	MDS University	Ajmer	Nov. 24-26, 1997	Treasurer Presented paper
National Seminar on Nutrition, Health and Population Links	MDS University	Ajmer	Dec. 30-31, 1997	Convener
Workshop on 'Population Education and Women Development Functionaries'	Dept. of Adult & Continuing Education Univ. of Rajasthan, Jaipur & MDS University	Ajmer	Jan. 23-24, 1998	Resource Person
Workshop on 'Safe Motherhood and Reproductive Health Education'	Dept. of Adult & Continuing Education Univ. of Rajasthan, Jaipur & MDS University	Ajmer	May 15-17, 1998	Resource Person
XXXI Annual Conference of Nutrition Society of India	Nutrition Society of India & National Institute of Nutrition	Hyderabad	Nov.26-28, 1998	Presented paper
National Conference on 'Diet, Health Promotion and Disease Prevention - Recent Advances'	Dept. of Foods & Nutrition, FHS, MS University of Baroda.	Baroda	Jan. 8-9, 1999	
National Seminar on Micronutrients in Human Health - Recent Advances	Dept. of Foods & Nutrition, MDS University	Ajmer	Feb. 25-26, 1999	Convener and Resource person
National Consultation on Benefits and Safety of Iodized Salt	All India Institute of Medical Sciences, and salt Dept. GOI	New Delhi	April 21, 1999	Resource Person
Workshop on 'Sports Medicine'	UGC and Dayanand College, Ajmer	Ajmer	Sept. 18-19, 1999	Presented Paper
XXXII Annual	and Indian Dietetic	New Delhi	Oct. 14-15, 1999	Adjudged award

Convention of Indian Didactic Association	Association			papers and Presented Paper
XXXII Annual Conference of NSI	Conference of Nutrition Society of India	Coimbatore	Nov. 25-26, 1999	Presented paper and Represented chapter as Convener
Indian Sports Medicine Congress	Sports Authority of India & Indian Association of Sports Medicine	New Delhi	Dec. 21-23, 1999	Presented paper
Seminar on 'Higher Education in Rajasthan- Present and Future Perspective'	Rajasthan Bar Federation	Ajmer	Feb. 20, 2000	
International Congress on 'Working with the Community to Improve Nutrition & Food Security	CARE and Dept. of Women & Child Dev. Ministry of HRD, GOI	New Delhi	March 6-8, 2000	
National Symposium on Child Health and Nutrition	Indian Council of Medical Research	Baroda	Dec. 21-22, 2000	Resource Person
National Seminar on Value Education: A Challenge for the Millennium for Home Science Extension	Dept. of Home Sc. Extension & Communication, F.H.S, M.S.University, Baroda	Baroda	Jan. 18-19, 2002	Co-chair for a session and Resource person
'National Workshop on Emerging Trends in Home Science'	UGC and Sophia Girls College	Ajmer	Dec. 2-4,2002	Special Guest & Resource Person
IX Asian Congress of Nutrition, 'Nutrition Goals for Asia-Vision 2020'	Federation of Asian Nutrition Societies and Nutrition Foundation of India	New Delhi	Feb, 23-27, 2003	Poster presentation
Patent Awareness Workshop	Patent Information Centre, DST, GOR Jaipur and M.D.S. University	Ajmer	March 27, 2003	
XXXV Annual meeting of Nutrition society of India	Nutrition society of India	Hyderabad	Dec. 12-13, 2003	Delegate & Convener, Ajmer Chapter
National Workshop on Methodologies for Assessment of Vitamin A Deficiency, Iron Deficiency Anemia & Iodine Deficiency Disorders.	Human Nutrition Unit, All India Institute of Medical Sciences	New Delhi	Sept. 13-15, 2004	
South Asian Conference on Entrepreneurship on 'New Age Entrepreneurship - VISION and VISTAS	Center for Entrepreneurship and small Business Management, M.D.S. University	Ajmer	Sept. 9-11,2005	
Faculty Development Programme on SPSS	SPSS & MDS University	Ajmer	Dec. Jan. 2006-07	

77th Annual Session of National Academy of Sciences, India; on 'Novel Approaches for Food and Nutritional Security'	National Academy of Sciences, India CFTRI, Mysore, December 6-8, 2007	Mysore	December 6-8, 2007	
National Workshop on Promoting excellence in Research PER-2008	MDS University, Ajmer	Ajmer	5-7 Nov, 2008	
International Workshop on " Micronutrients and Child Health"	Human Nutrition All India Institute of Medical Sciences(AIIMS), New Delhi	New Delhi	20 <sup>th</sup> - 23 <sup>rd</sup> October, 2009	Chaired a Session
Gandhi JayantiSamaroh 2009	MDS University, Ajmer	Ajmer	2 Oct, 2009	Coordinator
Inter University West Zone Tennis (Men) Tournament 2009-2010	MDS University, Ajmer	Ajmer	2-7 Jan, 2010	Core- Committee
CME on Role of Nutrition in Recovery of Hospitalized Patients	Mittal Hospital and Research Centre, Ajmer	Ajmer	30 July 2010	Co- Chair
Workshop on Emerging Career and Business Opportunities in Food Processing	IICPT, Thanjavur, Tamil Nadu, NIFTEM, Haryana, CPSMVS, Jaipur	Ajmer	5 August 2011	
National Seminar on Youth	PG Dpt. Of Sociology, DAV College, Ajmer	Ajmer	27-28 Feb, 2012	Chaired the Session
National Science Exhibition	DAV College, Ajmer	Ajmer	2012 and 2013	Chief Guest in Science Exhibition
National Seminar on Water and Sewage Management	Department of Environmental Science , MDS Univ., Ajmer	Ajmer	5 <sup>th</sup> to 7 <sup>th</sup> March 2013	
National Seminar on "Chishti order of Sufism and Indian culture"	MDS University Ajmer in collaboration with Punjabi University Patiala (Baba Farid Centre for Sufi Studies).	Ajmer	25th July 2013	Coordinator
World Ozone Day	DAV College, Ajmer	Ajmer	16 September, 2013	Key Note Address
2 <sup>nd</sup> International Workshop on Micronutrients and Child Health	AIIMS, New Delhi	New Delhi	3-7 Nov, 2014	Chaired a Session
National Conference on Innovative Strategies to enhance teaching learning strategies	NAAC	Ajmer	29-30 August, 2014	

National Workshop on Promoting Excellence in Research	Government Engineering College Ajmer	Ajmer	4-8 Feb, 2014	Delivered Lecture as Resource person
All India UGC- ASC Directors' Meet	UGC- Academic Staff College, Punjab University	Chandigarh	8-9 September, 2014	
World Wetlands Day	Dpt. Of Environment Science, MDS University, Ajmer in collaboration with Rajasthan State Pollution Control Board & District Committee on Environment, Ajmer	Ajmer	2 Feb, 2015	
Viraat Vyaktitva Samraat Prithviraj Chouhan and Madhyakaaleen Bharat	MDS University, Ajmer	Ajmer	14-15 March, 2015	

### DR. BHARTI JAIN

No.	Title of the Paper presented (Academic Session)	Title of Conference/ Seminar	Organised by	Whether international/national/state /regional/College or univ. level
1.	<b>Jain, Bharti</b> (2004): Health and Epidemiological Survey of Fluorosis in Newai Tehsil of Tonk District (Rajasthan).	First National Interdisciplinary Conference on Nutrition in Health and disease. 13 <sup>th</sup> to 15 <sup>th</sup> Feb. 2004	Govt. Medical College, Surat	National
2.	Bhatnagar, Barkha and <b>Jain, Bharti</b> (2004): A Comparative Study Among Adult Males and Females (20-40 years) To Predict Cardiovascular Disease using a Risk Assessment Index. pp 56	First Interdisciplinary Conference on Nutrition in Health & Disease 13 <sup>th</sup> to 15 <sup>th</sup> Feb.2004	Government Medical College, Surat (Presented by student)	<b>National</b>
3.	Mathur, Kirti, <b>Jain, Bharti</b> and Mathur, Purnima (2004): Assessment of Perinatal Outcome of Hypertensive Pregnant Women. pp 57	First Interdisciplinary Conference on Nutrition in Health & Disease 13 <sup>th</sup> to 15 <sup>th</sup> Feb.2004	Government Medical College, Surat (Presented by student)	National
4.	Kuvera, Divya; Dhukwal, Vimla and <b>Jain, Bharti (2004)</b> : Nutritional status of pre and post-menopausal women of Bikaner City: A comparative study.	First Interdisciplinary Conference on Nutrition in Health & Disease. 13 <sup>th</sup> to 15 <sup>th</sup> Feb.2004	Government Medical College, Surat (Presented by student)	National
5.	<b>Jain Bharti</b> (2005): Assessment of Adverse Child Sex Ratio	Seminar on declining number of Girl Child in present scenario. 12 <sup>th</sup> March 2005	MDS University, Ajmer Mahila Jan Adhikar Samiti, Ajmer	National
6.	<b>Jain Bharti</b> (2005): Importance	Workshop on Food	Centre for ESBM	University level

	of Food Preservation	Preservation 29 <sup>th</sup> August 2005	and Department of Foods and Nutrition, MDS University, Ajmer	
7.	<b>Jain Bharti</b> (2005): Principles of Food Preservation"	Workshop on Food Preservation 30 <sup>th</sup> August 2005	Centre for ESBM and Department of Foods and Nutrition, MDS University, Ajmer	University level
8.	<b>Jain Bharti</b> (2005): Methods of Food Preservation"	Workshop on Food Preservation 31st August 2005	Centre for ESBM and Department of Foods and Nutrition, MDS University, Ajmer	University level
9.	<b>Jain Bharti</b> (2005): Preservation of Vegetables at household level	Workshop on Food Preservation 1st September 2005	Centre for ESBM and Department of Foods and Nutrition, MDS University, Ajmer	University level
10.	<b>Jain Bharti</b> (2005): Selection of Fruits and Vegetables for Preservation	Workshop on Food Preservation 2 <sup>nd</sup> Sept. 2005	Centre for ESBM and Department of Foods and Nutrition, MDS University, Ajmer	University level
11.	<b>Jain Bharti</b> (2005): Improve Shelf life of Preserved products	Workshop on Food Preservation 3rd Sept. 2005	Centre for ESBM and Department of Foods and Nutrition, MDS University, Ajmer	University level
12.	<b>Jain Bharti</b> (2005): Nutritional Status and Energy Expenditure Pattern of Aged Men and Women of the Ajmer City	National Seminar on Challenges to the changing Status of Aged. 25 <sup>th</sup> to 26 <sup>th</sup> Nov. 2005	Department of Home Science Jai Narayan Vyas University, Jodhpur	National
13.	<b>Jain, Bharti</b> (2007): Acceptability Appraisal of Cakes and Biscuits incorporated with Soya Flour. (2007-08)	International Exhibition and Conference on processed food 29 <sup>th</sup> Aug to 2 <sup>nd</sup> Sept. 2007	Federation of Rajasthan Trade and Industry(FORTI), Jaipur	<b>International</b>
14.	<b>Jain Bharti</b> (2008): Prevalence of Malnutrition in rural areas	National Seminar on Panchayati Raj in Rajasthan: Performances, Appraisal and Restructuring 28 <sup>th</sup> to 29 <sup>th</sup> March 2008	Department of Political Science and Public Administration	National
15.	<b>Jain Bharti</b> (2009): Assessment of Adverse Child sex Ratio in Population	Training Of NSS Peer Educator Volunteers on Adverse Child Sex Ratio and Combating Sex Selection for Enhancing Dignity of Girl Child in Rajasthan, 7 <sup>th</sup> Nov. 2009	Development Resource Centre, Society to Uplift Rural Economy, Jaipur and MDS University, Ajmer, sponsored by UNFPA-WPC	State level
16.	<b>Jain Bharti</b> and Kuvera Divya :Assessment of knowledge and impact of nutritional education and counselling on change in	International Conference on Multidisciplinary Approaches to Diabetes Research and Health. Nov.	Department of Zoology. Univ. of Rajasthan, Jaipur.	<b>International</b>

	dietary habits and behaviour of middle aged diabetics.pp55	14-16,2010		
17.	YadavDeepika and <b>JainBharti</b> and BoolchandaniReshma : Impact of phytoestrogens on peri and post-menopausal symptoms of women aged 40-50 years.pp147	International Conference on Multidisciplinary Approaches to Diabetes Research and Health. Nov. 14-16,2010	Department of Zoology. Univ. of Rajasthan, Jaipur.	<b>International</b>
18.	KuveraDivya and <b>Jain Bharti</b> : Impact of knowledge on biochemical parameters of diabetics.pp157-158	International Conference on Multidisciplinary Approaches to Diabetes Research and Health. Nov. 14-16,2010	Department of Zoology. Univ. of Rajasthan, Jaipur. Nov. 14-16,2010	<b>International</b>
19.	<b>Jain Bharti</b> (2011): Development of Higher Education Management Information System	National Conference on Management and Accountability in Higher Education 8 <sup>th</sup> and 9 <sup>th</sup> January 2011	Government College Ajmer	National
20.	<b>Jain Bharti</b> (2011):Lucrative Entrepreneurial Potentiality in Soya Products Marketing	3 <sup>rd</sup> Biennial International Conference on Entrepreneurship themed Entrepreneurship in Growing Economies 22 <sup>nd</sup> 23 <sup>rd</sup> January 2011	Centre for Entrepreneurship and Small Business Management, Maharshi Dayanand Saraswati University, Ajmer	<b>International</b>
21.	<b>Jain Bharti:</b> (2011) Value added Food for Local and International Market: Focus on Soy Based Foods	Workshop on "Emerging Career and Business Opportunities in Food Processing. 5 <sup>th</sup> August 2011	IICPT, Thanjavur, Tamil Nadu; NIFTEM, Kundli, Haryana and CPSMVS, Jaipur, Rajasthan	National
22.	<b>Jain Bharti</b> (2011): Food Tourism in India	1 <sup>st</sup> National Conference on Tourism, Culture and Travel Literature 27 <sup>th</sup> to 28 <sup>th</sup> Sept. 2011	Department of Tourism, Govt. of Rajasthan and Centre for Tourism and Heritage Research, Dayanand College, Ajmer	National
23.	<b>Jain Bharti</b> (2012)Soy- Sattu Nutritional and Commercial Importance for Upcoming Women Entrepreneurs	National Seminar on Positioning Women Entrepreneurship in Changing Socio- Economic Milieu 2 <sup>nd</sup> and 3 <sup>rd</sup> Feb. 2012	Department of Home Science, University of Rajasthan, Jaipur under Special Assistance Programme	National
24.	<b>Jain Bharti</b> (2012): Helping Youth to Make Better Food Choices.	National Seminar on Youth, Globalization and changing perspectives 27 <sup>th</sup> and 28 <sup>th</sup> Feb. 2012	PG Department of Sociology, Dayanand College, Ajmer	National
25.	<b>Jain Bharti</b> (2012):FDI in Multi Brand Retail Food Sector in India.	National Conference on Multi Brand FDI in Organised Retail in India 1 <sup>st</sup> and 2 <sup>nd</sup> March 2012	Govt. College, Ajmer on	National

26.	<b>Jain Bharti</b> (2012) Food and Nutrition Security in India.	National Conference on Sustainable Rural Development in India. 10 <sup>th</sup> to 11 <sup>th</sup> March 2012	Department of Geography, Govt. College, Ajmer	National
27.	<b>Jain Bharti</b> (2012): Different types of Sugar used in Bakery products	Entrepreneurship and Skill Development Programme on Bakery Products 29 <sup>th</sup> February 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
28.	<b>Jain Bharti</b> (2012): Functional role of leavening agents in Bakery products	Entrepreneurship and Skill Development Programme on Bakery Products 1 <sup>st</sup> March 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
29.	<b>Jain Bharti</b> (2012): Basic Ingredients used in Baking	Entrepreneurship and Skill Development Programme on Bakery Products 6 <sup>th</sup> March 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
30.	<b>Jain Bharti</b> (2012): Basic terms used in Baking	Entrepreneurship and Skill Development Programme on Bakery Products 12 <sup>th</sup> March 2012	Centre for ESBM and Dept of Food Sc. and Nutrition, MDS University, Ajmer	University level
31.	<b>Jain Bharti</b> (2012): Flour Basics: All Purpose Flour, Bread Flour, Cake Flour	Entrepreneurship and Skill Development Programme on Bakery Products 15 <sup>th</sup> March 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
32.	<b>Jain Bharti</b> (2012): Nutritive Value of Bakery Products	Entrepreneurship and Skill Development Programme on Bakery Products 17 <sup>th</sup> March 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
33.	<b>Jain Bharti</b> (2012): Functional role of fats in bakery products	Entrepreneurship and Skill Development Programme on Bakery Products 30 <sup>th</sup> March 2012	Centre for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
34.	<b>Jain Bharti</b> (2012): Supplementation of Bakery Products with Nutrients	Entrepreneurship and Skill Development Programme on Bakery Products 30 <sup>th</sup> March 2012	Center for ESBM and Department of Food Science and Nutrition, MDS University, Ajmer	University level
35.	<b>Jain Bharti</b> (2012): Scope of Food Preservation	Workshop on Food preservation	Department of Food Science and Nutrition, MDS University, Ajmer	University level

			8 <sup>th</sup> October 2012	
36.	<b>Jain Bharti (2012):</b> Methods of Food Preservation	Workshop on Food preservation	Department of Food Science and Nutrition , MDS University, Ajmer 9 <sup>th</sup> October 2012	University level
37.	<b>Jain Bharti (2012):</b> Principles of Food Preservation	Workshop on Food preservation	Department of Food Science and Nutrition , MDS University, Ajmer 10 <sup>th</sup> October 2012	University level
38.	<b>Jain Bharti (2012):</b> Food Preservation at Household Level	Workshop on Food preservation	Department of Food Science and Nutrition , MDS University, Ajmer 11 <sup>th</sup> October 2012	University level
39.	<b>Jain Bharti (2012):</b> Packaging of Preserved Products	Workshop on Food preservation	Department of Food Science and Nutrition , MDS University, Ajmer 12 <sup>th</sup> October 2012	University level
40.	<b>Jain Bharti (2012):</b> How to Improve Shelf life of Preserved products	Workshop on Food preservation	Department of Food Science and Nutrition , MDS University, Ajmer 13 <sup>th</sup> October 2012	University level
41.	<b>Jain Bharti (2012): Jain Bharti (2012):</b> Medicinal and Therapeutic uses of Green Food Triticum aestivum	National Seminar on Recent advances in Botany 3 <sup>rd</sup> and 4 <sup>th</sup> Dec. 2012	Department of Botany, Dayanand College, Ajmer	National
42.	<b>Jain Bharti (2013):</b> Defluoridation of Drinking water: Efficacy and need.	National Seminar on Water and Sewage Management 5 <sup>th</sup> to 7 <sup>th</sup> March 2013	Department of Environmental Science , MDS Univ., Ajmer	National
43.	<b>Jain Bharti (2013) :</b> Adverse child sex ratio statistics	National Seminar on Women Empowerment 22 <sup>nd</sup> &23 <sup>rd</sup> March 2013	Department of Population studies , MDS University, Ajmer	National
44.	<b>Jain Bharti (2013) :</b> Role of media in the 21 <sup>st</sup> century	National Seminar on changing face of media and its relevance to society 28 <sup>th</sup> March 2013	KaptanDurga Prasad Choudhary Department of Journalism and Mass communication, MDS University, Ajmer	National

45.	<b>Jain Bharti (2013):</b> Algae: The nature's most nutritious green food	Workshop on Algae Cultivation and Biofuel Production 30 <sup>th</sup> July 2013	Algae Biofuel and Biomolecules Centre, MDS University, Ajmer	National
46.	<b>Jain Bharti (2013):</b> Malnutrition in India: Current Situation and Challenges	International Interdisciplinary Conference (ICSSR sponsored) on Human Resource Development in South Asia: Issues Achievement and Challenges 19-21 December , 2013	Government College , Ajmer	International
47.	<b>Jain Bharti (2014):</b> Nutraceuticals and Algaepreneurs	4 <sup>th</sup> Biennial International Conference on " Entrepreneurship, Tourism , Environment and Energy" on 11-12 Oct. 2014	Centre for Entrepreneurship and Small Business Management, MDS University, Ajmer	International
48.	<b>Jain Bharti (2014):</b> Farming Algae as a Human Food	4 <sup>th</sup> Biennial International Conference on " Entrepreneurship, Tourism , Environment and Energy" on 11-12 Oct. 2014	Centre for Entrepreneurship and Small Business Management, MDS University, Ajmer	International
49.	Jain Bharti (2015): Challenges in Adolescent Development and Health in India	National Workshop on "Census 2011 " held on 25th February 2015	Directorate of Census Operations, Rajasthan, Jaipur and Department of Population Studies, MDS University ,Ajmer	National
50.	Jain Bharti and PathakSakshi (2016): Weight Status and School Eating Pattern of Early Adolescents studying in Chandigarh City	National Conference on "Prevention and Management of Non Communicable Diseases held from 8 <sup>th</sup> -9 <sup>th</sup> January 2016	IIS University, Jaipur, Rajasthan	National
51.	Jain Bharti and Mathur Swati (2016): Assessment of Impact of Nutrition Education on Nutrient Intake of Type II Diabetics	National Conference on "Prevention and Management of Non Communicable Diseases held from 8 <sup>th</sup> -9 <sup>th</sup> January 2016	IIS University, Jaipur, Rajasthan	National

### DR. RITU MATHUR

1. Participated in a 3-Day National Seminar on "Role of University in Development of Affiliated Colleges" from 13-15 Feb. 1997 at MDS University, Ajmer.
2. Participated in a 2-Day National Seminar on "Evaluation and Assessment In Higher Education" from 30-31 Aug. 1997 at MDS University, Ajmer.
3. Participated in a 3-Day National Seminar with International participation on "Environment & Ecodegradation of Pushkar Valley, Rajasthan" from 25-27 Nov. 1997 at MDS University, Ajmer.
4. Participated in a 2-Day National Seminar on "Nutrition Health & Population Links" on 30-31 Dec. 1997 at MDS University, Ajmer and also presented a paper entitled " Under nutrition - A major health hazard for women in the reproductive age group".

5. Participated in a 3-Day National Seminar on "Indian Economy: Performance, Challenges and Alternatives" from 7th - 9th Jan. 1998 at MDS University, Ajmer and also presented a paper entitled "Food Sufficiency & Future Food Policy".
6. Participated in a 3-Day "Need based workshop in Botany, Zoology & Microbiology" from 15-17 Jan. 1998 at MDS University, Ajmer.
7. Participated in the Workshop on "Population, Education and Women Development functionaries" from 23-24 Jan. 1998 at MDS University, Ajmer.
8. Participated in a 3-Day workshop on Research Methodology from 24-26 Sept. 1998 at MDS University, Ajmer.
9. Participated in a 2-day National Seminar on Micronutrients in Human Health-Recent advances from 25-26 Feb 1999 at M.D.S.University, Ajmer and presented a paper entitled "Profile of Micronutrient deficiency disorders in Eastern Rajasthan"
10. Participated in a 4-Day Training on "Bacterial Taxonomy" from 27-30 November 2002 in the Department of Microbiology at M.D.S.University, Ajmer.
11. Participated in a 3-Day UGC sponsored National Workshop on "Emerging Trends in Home Science" from 2-4 December 2002 at Sophia College, Ajmer.
12. Participated in a 5-Day International Conference- IX Asian Congress of Nutrition organised in New Delhi from 23rd to 27th February 2003 and presented a poster entitled "Impact of dry green leafy vegetable powder alone and in combination with ascorbic acid in prevention of Anaemia in young women.
13. Attended the Patent awareness Workshop organised by Patent Information Centre, DST, GOR, Jaipur and Maharshi Dayanand Saraswati University, Ajmer, on 27th March, 2003 at Maharshi Dayanand Saraswati University, Ajmer.
14. Attended the IX annual conference organised by Parenteral and Enteral Nutrition Society of Asia (PENSA) and the Indian Society for Parenteral and Enteral Nutrition (ISPEN) from 7th to 8th November 2003 at Goa.
15. Attended the Critical Care Update on November 9th, 2003 at the IX Annual Conference, PENSA 2003 as Delegate at Goa.
16. Attended a six days workshop on food preservation organized by Department of Foods and Nutrition and Centre for Entrepreneurship and Small Business Management, M.D.S.University, Ajmer from 29th August 2005 to 3rd Sep 2005
17. Attended the First Biennial International Conference on "New age Entrepreneurship; Vision and Vistas organized by Centre for Entrepreneurship and Small Business Management from 9<sup>th</sup> to 11<sup>th</sup> September 2005.
18. Attended the 11<sup>th</sup> National Conference of Indian Society for Parenteral and Enteral Nutrition organized by ISPEN and KGMUniversity Lucknow from 5<sup>th</sup> to 7<sup>th</sup> Nov 2005
19. Attended a National seminar on Challenges to the changing status of the aged and presented a paper entitled "Effect of aging on taste sensitivity food preference and Nutritional Status of male population aged 50-70 years belonging to Ajmer city organized by Department of Home Science JNV University, Jodhpur from 25<sup>th</sup> -26<sup>th</sup> November 2005.
20. Attended a National Seminar on Ajmer through the Ages-Heritage Preservation organized by the Department of History M.D.S. University, Ajmer on 24<sup>th</sup> March 2006.
21. Attended a National Seminar on Recent Trends of Population growth in India organized by Department of Population studies, M.D.S. University, Ajmer on 25<sup>th</sup> March 2006.
22. Attended a Seminar on Biodiversity around Aravalli foothills in the vicinity of Ajmer (Rajasthan) organised by the Department of Zoology M.D.S. University Ajmer on 28<sup>th</sup> March 2006.
23. Participated in SPSS Faculty Development Program organised by SPSS and Department of Population Studies, M.D.S University, Ajmer in 3 phases – 20<sup>th</sup> December 2006, 4<sup>th</sup> January 2007 and 18<sup>th</sup> January 2007
24. Participated in a 5 Days Conference on International Exhibition and Conference on Processed Foods organised by Federation of Rajasthan Trade & Industry (FORTI ), Jaipur from 29<sup>th</sup> Aug – 2<sup>nd</sup> Sept 2007.
25. Participated in the 1<sup>3th</sup> Annual Conference of the Indian Society for Parenteral and Enteral Nutrition organised by the Department of Gastroenterology and Human Nutrition, AIIMS, New Delhi from 1<sup>2th</sup>-1<sup>4th</sup> Oct 2007 and **chaired a Scientific Session** in the Conference. Also presented a Poster in the Conference entitled "Prediction of risk of Cardio-vascular disease in Adult Males and Females using Risk Assessment Index."

26. Participated in the 3 days National Workshop on Promoting Excellence in Research (PER) organised in the MDS University, Ajmer from 5<sup>th</sup> to 7<sup>th</sup> November, 2008.
27. Participated in the 4 days International Workshop on "Micronutrients and Child Health" organised by the department of Human Nutrition All India Institute of Medical Sciences (AIIMS), New Delhi from 20<sup>th</sup>- 23<sup>rd</sup> October, 2009 and also presented a paper entitled "Development of Iron Rich Recipes incorporating Garden Cress Seeds and their Impact on Improving Iron Status of Anaemic Adolescent Girls."
28. Participated in a three days International Conference on "Multi-disciplinary approaches to Diabetes Research & Health" from 14<sup>th</sup>-16<sup>th</sup> November, 2010 organized by Dept. of Zoology, University of Rajasthan Jaipur and S.K Govt. College Sikar Rajasthan and presented a paper entitled "*Stevia Rebaudiana- A Miracle Herb"-Nutrient Composition and its Anti-hyperglycemic effect on Type II Diabetes Mellitus Patients. Paper awarded the best oral award.*
29. Participated in a two days State level Conference on "Nutrition & Health" from 25<sup>th</sup>-26<sup>th</sup> November, 2010 organized by Indian Dietetic Association Jaipur Chapter and Dept. of Home Science, Jaipur and presented a paper entitled " Anti hyperglycaemic effect of powdered form of Stevia Leaves on Pre Diabetics."
30. Participated in a two days State level Conference on "Nutrition & Health" from 25<sup>th</sup>-26<sup>th</sup> November,2010 organized by Indian Dietetic Association Jaipur Chapter and Dept. of Home Science,Jaipur and presented a paper entitled "*Impact Of Intervention With Two Varieties Of Raw Onions On Lipid Profile And Blood Pressure Of Patients Suffering From Hypertension*"
31. Attended one day workshop on "Emerging Career & Business Opportunities in Food Processing " held on 5<sup>th</sup> August,2011 at Jawahar Rangmanch Ajmer Rajasthan organised by Indian Institute Of Crop Processing Technology (IICPT) Thanjavur,TamilNadu,National Institute Of Food Technology Entrepreneurship & Management, Kundli, Haryana, Chitanya Paryavaran Sanrakshan Evam Manav Vikas Sansthan Jaipur.
32. Participated in a three days National Seminar on "Water and Sewage Management" from 5<sup>th</sup> -7<sup>th</sup> March 2013 at MDS University Ajmer organised by the Department of Environmental Science MDS University Ajmer and presented a paper entitled "Water-the most essential Nutrient for life-functions, requirement and impact of deficiency"
33. Participated in a one day National Seminar on "World Environment Day" on 5<sup>th</sup> June 2013 at MDS University Ajmer organised by the Department of Environmental Science MDS University Ajmer and presented a paper entitled "Indigenous and Judicious Ways to Save Food"
34. Participated in a one day National level Sufi Seminar on "Chishti order of Sufism and Indian culture" on 25<sup>th</sup> July 2013 organized by MDS University Ajmer in collaboration with Punjabi University Patiala (Baba Farid Centre for Sufi Studies).
35. Participated in a six days workshop on "Algae Cultivation and Bio fuel production " held from 26<sup>th</sup> July -31<sup>st</sup> July,2013 at MDS University Ajmer organised by Algae Bio fuel and Bio molecules centre and UGC Academic Staff College MDS University Ajmer and presented a paper entitled " Health and Nutritional benefits of Algae".
36. Participated in the 4<sup>th</sup> Biennial International Conference on Entrepreneurship, Tourism, Environment and Energy, held from 11th-12<sup>th</sup> October 2014 at MDS University Ajmer organised by Centre for Entrepreneurship and Small Business Management MDS University Ajmer and presented a paper entitled "Health Care Products in an Algal Bio-refinery Approach".
37. Participated in a two days National Seminar on "Missed Opportunities in Child Nutrition, Health and Development " held from 30<sup>th</sup>-31<sup>st</sup> January 2015 at University of Rajasthan , Jaipur organised by Department of Home Science, University of Rajasthan , Jaipur, sponsored by UGC SAP and UNICEF and presented a paper entitled " Micronutrient Deficiency in Pregnancy and its Impact on Neonatal Outcome ".
38. Participated in a one day National Seminar on "World Wetland Day " held on 2<sup>nd</sup> February 2015 at MDS University ,Ajmer organised by Department of Environmental Science MDS University ,Ajmer and Rajasthan State Pollution Control Board and District Committee on Environment.
39. Participated in a one day National Workshop on "Census 2011 " held on 25th February 2015 at MDS University ,Ajmer organised by Directorate of Census Operations, Rajasthan, Jaipur and Department of Population Studies, MDS University ,Ajmer and presented a Paper entitled " Strategies to Combat Anaemia in Female Adolescents. "

40. Mathur Shalini; Mathur Ritu; **Kohli, G. Kalsi**; Moyal Namita(2015) Assessment of Nutritional Status of Anemic women and Impact of Intervention with Wheat Grass Juice; Rajasthan Conclave 3, Dec 13-14, 2015, DMRC (ICMR) Jodhpur.
41. Mathur Shalini; Mathur Ritu; **Kohli, G. Kalsi**; Moyal Namita(2016) Impact of Intervention with Wheat grass juice on Anemic Women ; 31<sup>st</sup> Biennial National Conference of HSAI, UAS, Dharwad, Karnataka
42. Participated in a two days National Conference on "on "Prevention and Management of Non Communicable Diseases "held from 8<sup>th</sup>-9<sup>th</sup> January 2016 at IIS University Jaipur, Rajasthan and presented a Paper entitled "Assessment of Health and Nutritional Status and Dietary Habits of Women suffering from Hypothyroidism Aged 18-54 years in Ajmer City.

## APPENDIX IV

### CODE OF ETHICS FOR RESEARCH FOLLOWED BY THE DEPARTMENT

Students for MSc and PhD are asked to go through the Laboratory safety norms of the Department of Food Science and Nutrition and ethics in research conduction and communication. The students in M.Sc. and Ph.D. have to sign an Undertaking that they have read the guidelines for Working in Foods and Nutrition Laboratories and shall abide with them and will be responsible for any carelessness.

Similarly before beginning Project/Research work they have to submit an Affidavit declaring that

- They would take utmost care in following work ethics, norms of laboratory safety, publishing ethics and the national norms related to bioethics and biodiversity.
- That in case the outcome of the project work is presented or published in full, the names and the order of the authors will be finalized by the teacher advisor on the basis of the contribution to the research outcome in terms of intellectual input (important suggestions, guidance, criticism, analysing the results, discussing them and drawing conclusions) and conduction of research work.
- That they would maintain two hard and one soft copy(ies) of their research work, wherein any intellectual contribution made by them in terms of novel idea will be recorded in both hard copies duly countersigned by their supervisor and one hard and one soft copy of raw data and records will be submitted to the Supervisor at the Department of Food Science and Nutrition at MDS University, Ajmer and one hard copy to the Head of the Department in order to ensure his/her claim as one of the authors in case any manuscript/presentation/patent/copyright carries this information.

### GUIDELINES FOR WORKING IN BIOCHEMISTRY, FOOD SCIENCE, MICROBIOLOGY LABORATORIES

1. Students must follow all safety practices while working in laboratories. They must also consult class notes and library for the purpose.
2. Before handling chemicals, read warning signs on the bottle label and take precautions accordingly and go through the Material Safety Worksheet (MSW) of the chemical at the internet.
3. All flammable and highly volatile chemicals should be placed in refrigerators only. Such chemicals if issued newly from stores must be kept in refrigerator for at least 2 hours before attempting to open the bottle.
4. Always open as well as pour bottles keeping the mouth of the bottle away from your body.
5. If ever the autoclave pressure rises more than normal leading to high noise of steam, then immediately put off all lights from the mains and allow the autoclave to cool down. Once cooled, enter the room and put off the switches, then only put on the mains.
6. While mouth pipetting, confirm that the pipette tip is immersed in the liquid for the entire period of sucking.
7. Use cotton plugged pipettes while handling cultures.
8. Never mouth pipette dangerous chemicals.
9. Keep nose and mouth covered while working with fine powders.
10. Observe full care while picking, transporting (carrying), pouring out chemicals and preparing reagents.
11. Look for the place where a First Aid Box is kept and satisfy yourself whether it contains the required material or not.
12. Be extra careful for gas leakage, if detected any, remove the LPG cylinder to an open place and report immediately to any faculty or staff member.
13. Care must be taken while working with electrical instruments and autoclaves.
14. Know the working of the instruments to be used before hand and keep a xerox of the manual handy.
15. Do not allow unknown person(s) and/or visitors inside the laboratory/rooms of the department for it's your responsibility to prevent any loss of material or theft in the department.
16. Never leave laboratories and rooms uncared for. Lock them if work is over or is to be done for longer period in some other room/laboratory.
17. When completed, check whether all instruments you used have been properly switched off or not.

18. If any window was opened for a good reason, close it before leaving.
19. Before leaving, check whether all laboratories and rooms are properly locked or not.
20. In case of emergencies call the Head/ faculty member (2644234/ 9462788558/ 9413949910).
21. Keep handy, telephone number(s) of the nearest hospital/ambulance.

Fire Brigade	101
JawaharLal Nehru Hospital	2625500 to 2625509
Janana Hospital	2787699 to 2787701
Ambulance	108

## APPENDIX V

### LIST OF STUDENTS WHO QUALIFIED UGC NET, SET (RPSC) ICAR NET and OTHER COMPETITIVE EXAMS.

<b>1</b>	<b>UGC NET for JR Fellowship in Home Science</b> 1.Swati Mathur, 2013 2. Garima Lakhotia, 2013
<b>2</b>	<b>UGC NET</b> 1.Manika Mathur 2.Namita Moyal 3. Kirti Mathur 4.Neha Anijwal 5.Ankita Gupta 6. Nisha Kumawat
<b>3</b>	<b>SLET HOME SCIENCE (RPSC)</b> 1. Ruchi Udawat 2. Shweta Singh 3. Poonam Jethani 4. Neha Anijwal 5. Sakshi Sharma 6. Kirti Mathur 7. Poonam Jethani 8. Naina Raizada 9. Pooja Mathur 10. Prajesh Mahawar 11. Abhilasha Chauhan 12. Mamta Kharol
<b>4</b>	<b>ICAR NET</b> 1.Barkha Bhatnagar 2. Abha Mundra 3. Namrata Jain

## APPENDIX VI

### ALUMNI PROFILE OF THE DEPARTMENT

#### Dietician in Hospitals

S. No.	Name	Name of Organization
1	Vinita Rai	Mittal Hospital & Research Centre, Ajmer
2	Sangeeta Saxena	Mittal Hospital & Research Centre, Ajmer
3	Nausheen Khan	Mittal Hospital & Research Centre, Ajmer
4	Tripti Harshwal	Fortis Escorts Hospital, Jaipur
5	Manica Mathur	Mittal Hospital & Research Centre, Ajmer
6	Swapnika Sachdev	Mittal Hospital & Research Centre, Ajmer
7	Gauri Mehra	Mittal Hospital & Research Centre, Ajmer
8	Shweta Sharma	Mittal Hospital & Research Centre, Ajmer
9	Nutan Sahrama	Mittal Hospital & Research Centre, Ajmer
10	Deepika Sharma	Mittal Hospital & Research Centre, Ajmer
11	Pooja Sharma	Mittal Hospital & Research Centre, Ajmer
12	Payal Jain	Cancer Research Hospital, Ahemdabad
13	Rajshree Sharma	Mittal Hospital & Research Centre, Ajmer
14	Neetu Mishra	Mittal Hospital & Research Centre, Ajmer Presently Parshad in Nagar Nigam Ajmer
15	Sweetey Yadav	Dietician with Dr. Rajneesh Saxena Diabetic Clinic, Ajmer
16	Divya Karnawat	Kshetrapa IMulti Specialty Hospital, Ajmer
17	Preeti Nahar	USA
18	Tanushree Joshna	Chandigarh

19	Shrishti Chhatree	Appolo Hospital, Delhi
20	Sakshi Sharma	Escorts Hospital, Delhi
21	Tarannum Khan	HDMH, Jaipur
22	Sakshi Sharma	Max Hospital, Delhi
23	Shweta Neomi Katchik	NGO
24	Jaya Benjamin	AIIMS, Delhi

### Health and Nutrition Counsellor in Gyms/ VLCC/ Obesity Clinics

S.No.	Name	Name of Organization
1	Aakansha Messay	Gold Gym, Ajmer
2	Monika Sharma	Talwalkars Gym, Ajmer
3	Bharti Gurnani	Talwalkars Gym, Ajmer
4	Meenakshi Chauhan	VLCC, Ajmer
5	Juhi Mathur	VLCC, Mumbai
6	Richa Pareek	VLCC, Jaipur

### Entrepreneurs in Health and Nutrition Sectors

S.No.	Name	Place
1	Naina Raizada	Ajmer
2	Pooja Mathur	Delhi
3	Kirti Mathur	Delhi
4	B Lily Raju	Bengaluru
5	Dr. Ankita Gupta	Jaipur
6	Mitali Mathur	USA
7	Priyanka Agarwal	Ajmer
8	Priyanka Arora	Ajmer

### Alumni in Academic Institutions

S.No.	Name	Name of Organization
1	Dr. Sarla Lakhawat* (President Award)	Assistant Professor, MPUAT, Udaipur
2	Dr. Namita S Moyal	Guest Faculty, Dept. of Food Science & Nutrition, MDS University, Ajmer
3	Poonam Jethani	Guest Faculty, Dept. of Food Science & Nutrition, MDS University, Ajmer
4	Swati Mathur	Guest Faculty, Dept. of Food Science & Nutrition, MDS University, Ajmer
5	Sakshi Pathak	Guest Faculty, Dept. of Food Science & Nutrition, MDS University, Ajmer
6	Abhilasaha Chauhan	Guest Faculty, Dept. of Food Science & Nutrition, MDS University, Ajmer
7	Preeti Parihar	Lecturer, Home Science College, Jodhpur
8	Esha Vyas	Assistant Professor, IIS University, Jaipur
9	Manisha Sharma	Teacher, Mayo College (Girls), Ajmer
10	Dr. Renuka Sharma	Principal DAV College, Beawar
11	Dr. Pearl D'suoza	Vice Principal Sophia College, Ajmer
12	Dr. Nisha Kumawat	Principal, Government High School, Jaipur
13	Anita Dagdi	School Principal, Beawar
14	Dr. Navita Srivastava	Lacturer, Government Girls College, Sarwar, Ajmer
15	Paramjeet Kaur	School Teacher, Ajmer

16	Namrata Chauhan	Teacher, Ryan International School, Ajmer
17	Jaya Benjamin	Assistant Professor, Institute of Liver and Biliary Sciences, New Delhi.
18	Dr. Sushila Yadav	Director Dept. of Physical Education, JLN Medical College & Hospital, Ajmer
19	Ruchi Mathur	Lecturer, RK Patani girls College. Kishangarh, Ajmer
20	Shweta Sharma	Lecturer Sophia Girls College, Ajmer
21	Dr. Nandini Johari	Assistant professor, Dayalbagh Educational Institute, Agra
22	Meenakshi Natyal	Lecturer, Savitri College, Ajmer
23	Geeta Gangwar	School Teacher, Jaipur
24	Hema Rupawat	School Teacher, Saradhana
25	Sarika Chundawat	Lecturer, Home Science College, Lakshmanagarh
26	Mamta Kharol	School Teacher, Jaipur
27	Monika Sharma	BT Coaching Centre, Ajmer

## APPENDIX VII

### LIST OF M.PHIL DOCTORAL (Ph. D.) STUDENTS OF THE DEPARTMENT

**DR. G. KALSI KOHLI**

#### LIST OF DOCTORAL (Ph. D.) STUDENTS

S. No.	NAME	REGISTRATION No.	TITLE	REMARKS
1	Abha Mundra	2344/99/1836-45 1/3-4-2000	Iron Status of Young Adult Women (18-24 yrs) of Ajmer : Situational Analysis and Development of Low Cost Iron Rich Recipes	Awarded
2	Sarla Lakhawat	2343/99/2000/18 36-45 1/3-4-2000	Development of Database on Physical Growth of Children (6-12 years) and Effect of Nutrition Education on Knowledge, Attitude and Behaviour of School Children from Rural Ajmer	Awarded
3	Ranjana Gupta	2483/99/381-82 27-3-2000	Development of Information, Education and Communication Material on Nutrition and Health of Family for Rural Adolescent Girls	Awarded
4	Nisha Kumawat	2000/2650/02/96 20-21 26.03.2003	Development of Nutritious Recipes by Incorporating Dry Green Leafy Vegetable Powder and Impact of Feeding them on the Nutritional Status of School Age Children (6-9 yrs)	Awarded
5	Ankita Gupta	2700-3/21985-86 10-6-04	Effect of Feeding soybean (Glycine Max) to Peri and Postmenopausal Women on their Climacteric Symptoms, Serum Lipid Profile and Bone Mineral Density	Awarded
6	Sr. Pearl D'Souza	2717- 2004/29061-78, 13-11-04	Impact of the Correlation of Anaemia on the Nutritional status and Mental Performance of Urban adolescent Girls (16-18 years)	Awarded
7	Pratishtha Shrotriya	2006/120/05/875 8-59 4.03.2006	Food and Health Security of Households of Industrial Workers (Bhilwara, Rajasthan)	Left due to personal reasons
8	Namita Moyal	2006/128/05/169 37-42 1.06.2006	Nutritional and Health Consequences Associated with Food Insecurity in Elderly Males (60-80 Years) of Ajmer City.	Awarded
9	Renuka Sharma	2006/130/05/169 37-42 1.06.2006	Risk Factors of Chronic Degenerative Diseases especially Coronary Heart Disease in Adult Men (30-60 Years) Residing in Beawar Town (Ajmer, Rajasthan)	Awarded
10	Asem Jayanti Devi	07-09-2009/ EN.NO-2007/ 24454/ 21-01- 2012	Efficacy of Yogic Life Style Modification in Non-Insulin Dependent Diabetes Mellitus Patients	Submitted
11	Shalini Mathur	Admitted in 2015		Pursuing Course Work
12	Namrata Chouhan	Admitted in 2015		Pursuing Course Work
13	Garima Lakhotia	Admitted in 2015		Pursuing Course Work

**DR. BHARTI JAIN****LIST OF DOCTORAL (Ph. D.) STUDENTS**

S. No.	Name of the Student	Topic of the Research	Ph. Degree awarded: Date and Session
1	<b>Kirti Mathur</b>	Evaluation of Maternal Nutritional Profile and associated complications of pregnancy induced hypertension with perinatal outcome	22-07-2006 (2006-07)
2	<b>Divya Kuvera</b>	Nutritional Profile, Impact of Nutrition Education on Dietary Habits and Behaviour of Middle aged Diabetics and Acceptability of Products Developed from Traditional Hypoglycemic Agents	27-04-2006 (2005-06)
3	Barkha Bhatnagar	Chemical Analysis of Proximate Principles and Protease Inhibitors in different varieties of Soyabean (Glycine Max) in Rajasthan and development of baked food products.	27-12-12 (2011-2012)
4	Navita Shrivastava	A Study of The Health Educational And Socioeconomic Status of Rural Adolescent Girls (Age 13-18) of Ajmer District And Its Correlation With Their Value System	2015
5	Shweta Singh	Impact of nutrition counselling on dietary behaviour of school going children and their parents	25/04/2011
6	Swati Mathur	Pursuing Course Work	Admitted in 2015
7	Sakshi Pathak	Pursuing Course Work	Admitted in 2015

**DR. RITU MATHUR****LIST OF DOCTORAL (Ph. D.) STUDENTS**

SNo.	Name	Title of Research	Awarded on
1.	Anil Kumar Patni	Detection of various pesticide residues and fatty acid profiles of branded and unbranded edible oil samples of Ajmer city by Gas Liquid Chromatographic Technique.	12.5.2008
2.	Vinita Rai	Nutritional Profile and psycho-social factors in the etiology of acid peptic disease in middle aged men and women of Ajmer city.	12.1.12
3	Nandini Johari	" <i>Stevia rebaudiana</i> – A sweet herb"-Nutrient composition, use as a sweetener substitute and its Hypoglycemic and hypolipidemic effect on Non-Insulin Dependent Diabetes Mellitus Patients	24.8.11
4	Ruchi Mathur	<i>Applied for Registration</i>	Course work completed
5	Meenakshi Jakhad	<i>Applied for Registration</i>	Course work completed
6	Ruchi Tolumbia		Pursuing Course Work
7	Pooja Sharma		Pursuing Course Work
8	Shweta Sehgal		Pursuing Course Work

**LIST OF M. PHIL. STUDENTS****DR. G. KALSI KOHLI**

S. No.	Name of the Student	M. Phil. Degree Awarded	Topic of the Research
1	Abhilasha Chouhan	2007	Household Food and Nutrition Security among Agricultural Labourers of Ajmer District
2	Meenakshi Chouhan	2007	Nutrition related KAB (Knowledge, Attitude, Behaviour) before and after nutrition counselling of adolescent girls (16-18 years) of Ajmer City
3	Pooja Chouhan	2007	
4	Shikha Jindal	2007	Nutrition labelling as a source of nutrition information and health claims of food products available in the local market
5	Shipra Singh	2007	
6	ArtiYadav	2008	A comparative study to assess the effect of Neem leaves powder on blood glucose level of NIDDM patients aged 40 to 60 years
7	Bharti Sharma	2008	Assessment of Mother's Knowledge Regarding Prevailing Infant Feeding practices and their association with infant's health in the Anganwadi Centres of Ajmer City
8	Neetu Verma	2008	Appraisal of ICDS program and assessment of nutritional status of children (3-6 years) beneficiary of ICDS in Ajmer City
9	Rinku Sharma	2008	Nutritional status climacteric symptoms and attitude towards menopause of working and non-working menopausal women (45-55 years) of Ajmer City
10	Sunita Sahu	2008	Critical Appraisal of mid-day meal program in Ajmer City

**DR BHARTI JAIN**

	Name of the Student	Degree awarded	Topic of the Research
1	Neetu Mishra	2007	Hypoglycemic Effect of Gular (Ficus glomerata) on newly diagnosed Type II Diabetic Patients.
2	Priya Saini	2007	Effect of Punarnava (Boerhaavia diffusa) on the haemoglobin level of anemic adolescent girls.
3	Manisha Sharma	2007	Medicinal use of Aloe Vera in treatment of Irritable Bowel Syndrome, and acceptability of products developed from Aloe Vera.
4	Shubha Yadav	2007	Hypolipidemic effect of Guggal (Commiphora wightii) and Arjuna Bark (Terminalia Arjuna) on Dyslipidemic Men (45-55 years).
5	Deepika Yadav	2008	Effect of soy isoflavones supplementation on pre and post – menopausal symptoms and lipid profile assessment.
6	Anita Dagdi	2008	Processing and Analysis of Proximate Principles and Acceptability Appraisal of Tofu developed from different soyabean genotypes- NRC-37 and JC- 335.
7	Yasmin	2008	Analysis of Proximate Principles after domestic processing and acceptability appraisal of soy curd developed from different cultivars of soyabean.
8	Nirmala Rapswal	2008	Quantitative Analysis of Proximate Principles pre and post domestic processing and acceptability appraisal of soysattu

			developed from Js-9305 Cultivars.
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**DR. RITU MATHUR**

1.	Megha Rani Jain	2007	Assessment of nutritional status of Rheumatoid Arthritis patients in Kishangarh (Ajmer city)
2.	Naina Raizada	2007	Joint effect of alcohol and cigarette on Atherogenic lipids and lipoproteins profile in males (35-65 years)
3	Sarika Chundawat	2007	Assessment of risk factors of hypertension and hyperlipidemia and Impact of wheat grass juice on hypertensive and mild hyperlipidemic Type II A patients.
4	Shipra Ajmera	2007	Detection of food adulteration in selected food samples in different areas of Ajmer city and assessing the impact of education on consumers.
5	Jyoti Aludia	2008	Development and Sensory Evaluation of Low Glycemic Index Recipes and Assessment of Their Glycemic Response in Male Patients Suffering from Impaired Glucose Tolerance.
6	Medha Mishra	2008	A Study on Obesity and its Relationship with Hypertension, Physical Activity Pattern and Attitude towards Life among Adolescents Obese boys and Obese girls of Age Group (14-16 Years) of Upper Middle Income Group and High Income Group of Ajmer City.
7	Priyanka Agarwal	2008	Development and Sensory Evaluation of Low cost Iron Rich Recipe Incorporating Garden Cress Seeds and Their Impact on Improving Iron status of Anemic Adolescent Girls.
8	Swati Jha	2008	Nutritional Profile of Middle Aged Cardiovascular Patients (40-60 Years) of Escorts Kalyani Hospital, Gurgaon, with Special Emphasis on Dietary Patterns.

**सूक्ष्मजीवविज्ञान**

**विभाग**

**DEPARTMENT  
OF  
MICROBIOLOGY**

1. **Name of the Department** : Microbiology
2. **Year of establishment** : 1993
3. **Is the Department part of a School/Faculty of the university?** Faculty of Science
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.):**
  - M.Sc. Microbiology
  - Ph.D.
5. **Interdisciplinary programmes and departments involved:** Algae Biofuel & Biomolecules Centre: An Study Centre established in Department of Microbiology for Interdisciplinary Research & Outreach Program involving Faculty from Microbiology, Food Science & Nutrition, Environmental Science, Economics and Management (Please see Evaluative Report of Algae Biofuel & Biomolecules Centre)  
Since 2105-16 Courses in M.Sc. Microbiology and M.Sc. Environmental Science are being run in CBCS scheme in the Departments of Microbiology.
6. **Courses in collaboration with other universities, industries, foreign institutions, etc. :** Nil
7. **Details of programmes discontinued, if any, with reasons :**  
M.Sc. Biotechnology, M.Phil. Microbiology and M.Phil. Biotechnology  
Courses were conducted as Self Financing courses and were discontinued primarily due to the non availability of specialized persons in or near Ajmer.
8. **Examination System:** Annual/Semester/~~Trimester~~/Choice Based Credit System
9. **Participation of the department in the courses offered by other departments:**  
**Zoology:** Dr. Ashish Bhatnagar and Dr. Monica Bhatnagar assist teaching of segments of syllabus dealing with microbiology and molecular biology  
**Environmental Science:** MSc Environmental Science being under CBCS scheme, faculty assists teaching of optional courses offered in Microbiology  
From 2015-16, M.Sc. Microbiology and M.Sc. Environmental Science are being run under CBCS scheme.
10. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

	Sanctioned	Filled	Actual (including CAS & MPS)
<b>Professor</b>	1	Nil	Nil
<b>Associate Professor</b>	1	Nil	2
<b>Assistant Professor</b>	3	2 (Both promoted to Associate Professor through CAS)	Nil

11. **Faculty profile with name, qualification, designation, area of specialization,**

### experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
<b>Ashish Bhatnagar</b>	Ph.D. & M.Sc. Microbiology	Associate Professor	Algae Biofuel, Cyanobacterial Biodiversity, Desert Microbiology, Wastewater remediation	22	2 (Hemraj Chhipa & Jaspreet Singh 2012)
<b>Monica Bhatnagar</b>	Ph.D. & M.Sc. Microbiology	Associate Professor	Wound management, Biopolymers, Wastewater remediation (Biosorption), Desiccation tolerance, Bacterial Biodiversity	18	4 (2012: Ashwanti, Om Prakash; 2013: Moshumi, Neetu) + 1 as co supervisor (Laxmi)

#### 12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:

##### Adjunct Faculty:

**Department of Environmental Science:** Faculty teaches Microbiology students who have offered courses in Environmental Science for MSc Microbiology (CBCS)

**Department of Food Science & Nutrition:** Dr. Ritu Mathur for Food Microbiology,

**Department of Economics:** Dr. Shiv Dayal Singh for Biostatistics

#### 13. Percentage of classes taken by temporary faculty – programme-wise information:

**M.Sc. Microbiology:** 35% Guest Faculty + 5% by Adjunct Faculty (Appendix I)

#### 14. Programme-wise Student Teacher Ratio

M.Sc. 40:6

Ph.D. 2:1

#### 15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Designation	Sanctioned	Filled	Actual
Lab Assistant	1	1	1
Lab Boy	1	1	1
Storekeeper (LDC)	1	1	1
IV Class	Nil	1	1

#### 16. Research thrust areas as recognized by major funding agencies : Microalgal-Cyanobacterial Biodiversity and Bacterial Taxonomy, Algae Biofuel & Biomolecules, Stress Biology of microorganisms

#### 17. Number of faculty with ongoing projects from a) National funding agencies, b) International funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

##### a) National funding agencies

##### Ongoing Project

1. "Microbial Diversity of oral cavity and gastrointestinal tract of certain lizard species (Saurian) from some selected regions of Central Aravalli foothills of Rajasthan, India" PI: Dr. Neha Sharma, Mentor: Dr. Ashish Bhatnagar Rs. 22.4 lakh from 14.5.13 to 13.5.16

2. Dr. Ashish Bhatnagar, Dr. Monica Bhatnagar, Dr. Bharti Jain, Dr. Ritu Mathur, Dr. Praveen Mathur, Dr. Subroto Dutta, Dr. Shiv Dayal Singh, Dr. Ashish Pareek, Dr. Deepika Upadhyaya: **Algae Biofuel & Biomolecules Centre**- An interdisciplinary research centre of MDS University, Ajmer lead by Department of Microbiology includes faculty from Departments of Environmental Science, Food Science & Nutrition, Economics and Centre for Entrepreneurship and Small Business Management.

#### **Major Research Project completed in last five years**

1. P.I. Dr. Monica Bhatnagar, Co-PI: Dr. Ashish Bhatnagar: Ministry of Environment & Forests, Government of India: **Prosthecate Bacteria & Micrococcus Centre**, A Collaborative Centre for Centre for Research on Bacteria & Archaea under All India Coordinated Project on Taxonomy. Outlay: Rs. 33,61,468/- (31.1.2000 to 31.03.2012).

#### **Proposed Project (National)**

1. UGC: Prospecting community wastewater tolerant, mixotrophic, oleogenic algae in Rajasthan for Biodiesel Production and Wastewater remediation : Ashish Bhatnagar (Rs. 25.7 lakh) submitted on 30.9.2014
2. UGC: Cyanobacterial polymers for wound management: Monica Bhatnagar (Rs. 28.72 lakh) submitted on 30.9.2014
3. For Algae Biofuel & Biomolecules Centre: DBT: Ashish Bhatnagar, Monica Bhatnagar, Pavan Dadheech 28.2.15 Feasible Mass Cultivation of Algae as Biofuel Feedstock in Rajasthan(Interventions: Nutrient Supply, Water demand and spent biomass utilization) (Rs. 98.75 lakh) under Call for Proposals for Challenge Program on Algal biomass production for cost effective biofuel. Presentation made on 11.12.15 at Delhi and revised proposal asked to be submitted by the end of January 2016.

**b) International funding agencies : Nil**

**c) Total Research Project Funding since 1999: Rs. 75.01 lakh**

### **18. Inter-institutional collaborative projects and associated grants received**

#### **a) National collaboration**

1. P.I. Dr. Monica Bhatnagar. Co-Investigator: Ashish Bhatnagar. Ministry of Environment & Forests, Government of India: **Prosthecate Bacteria & Micrococcus Centre (ProMiC)**, a collaborative unit of the Centre for Research on Bacteria and Archaea under All India Coordinated Project on Taxonomy. (Completed on 31.3.2012). Outlay: Rs. 33.61 lakh for ProMiC(Collaborators included: Delhi University South Campus, New Delhi; Agarakar Research Institute, Pune; G.B. Pant University of Agriculture & Technology Pantnagar; and Rani Durgawati University, Jabalpur)

#### **b) International collaboration**

Proposed on Metagenomic census and microbiome engineering for remediating non-wetting soils has proposed a collaborative project for Indo-Australian Biotechnology Fund 2015-16 involving Dr. B. Ramakrishnan, Microbiology Division, IARI, New Delhi, A Bhatnagar, MDS University Ajmer, T Shrivastava IIT, Mandi (HP), S Hazarika, ICAR Res Complex for NEHR, Umiam and D Thakuria Central Agricultural University, Umiam in India for Rs. 1,69,70,200/- and Australian collaborators are R. Naidu, M. Mallavarapu and T. Palanisami of CRC, CARE, Australia.

(Informal Academic collaborations of the department have lead to several joint publications and research project grant proposals (Appendix II)

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. Nil

20. Research facility/centre with

- state recognition: Nil
- national recognition

1. **Satellite Centre for Microalgal Biodiversity in Arid Zones of Rajasthan** (SCMBAZR) 1999-2002 recognized by the *Department of Biotechnology, Government of India* (Facilities created: Growth Room, Germplasm collection Centre, Gas Chromatograph with FID and basic facilities (Rs. 12,27,000/-) Total sanction: Rs. 19 lakh

2. **Prosthecate Bacteria & Micrococcus Centre** (ProMiC) 2000-2012 recognized by the *Ministry of Environment & Forests, Government of India* (Facilities created for chemotaxonomy GC cylinders and Biolog for Auxanogram, Microwave oven, refrigerator, laptop (Rs. 6,50,000/-) Total sanction Rs. 33.61 lakh

- international recognition: Nil

21. Special research laboratories sponsored by/created by industry or corporate bodies : Nil

22. Publications:

- \* **Number of papers** published in peer reviewed journals (national/ international) 48 (Appendix III)

Last five years: Ashish Bhatnagar : (19 International+12 National) Last 5 years: (8 International + 5 National)

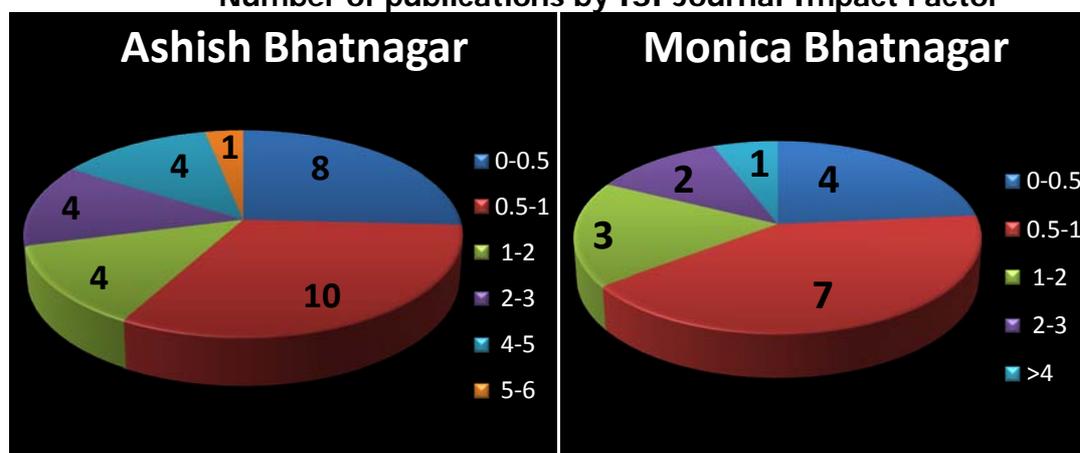
Monica Bhatnagar: (11 International+6 National); Last five years: (5 International + 5 National)

- \* **Number of publications with ISI Journal impact Factor (Thompson Reuter) :**

**Ashish Bhatnagar:** Total 19, Last 5 years 14

**Monica Bhatnagar:** Total 9; Last 5 years: 7

**Number of publications by ISI Journal Impact Factor**



\* **Monographs** : Nil

\* **Chapters in Books (last 5 years)** A Bhatnagar 2, M Bhatnagar 2 (App III)

\* **Paper Published in Symposium Proceedings:** Nil

\* **Edited Books:** Nil

\* **Books with ISBN with details of publishers:** Nil

\* **Gene sequences submitted at NCBI:** 29

\* **Number listed in International Database** (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.): Ashish Bhatnagar 11, Monica Bhatnagar 8

\* **Citation Index** – range/average

\* **SNIP** Not known  
 \* **SJR** 0- **3.385**/0.783  
 \* **Impact Factor** 0-**5.261**/1.614  
 \* **h-index** 0-**152**/53.29

### Citation indices of the faculty based on Google Scholar

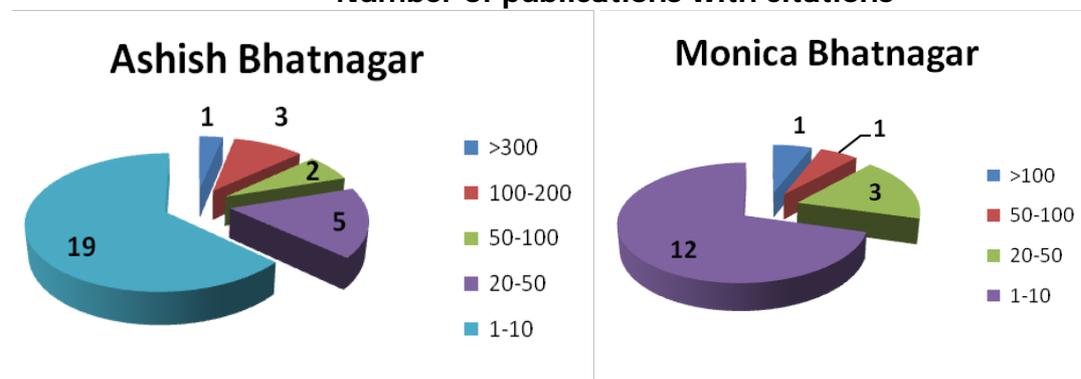
#### Ashish Bhatnagar

Citation indices	All	Since 2011
Citations	1021	911
h-index	11	11
i10-index	11	11

#### Monica Bhatnagar

Citation indices	All	Since 2011
Citations	307	236
h-index	6	6
i10-index	5	5

### Number of publications with citations



### 23. Details of patents and income generated

**US Patent Granted:** May 13, 2014: Patent No. US 8,722,389 B1, Method and System of Culturing an Algal Mat: KC Das, BR Cannon, A. Bhatnagar and S. Chinnasamy.

**US Patent Pending:**

1. **Ashish Bhatnagar**, Senthil Chinnasamy and Keshav C. Das. April 20, 2009. Mixotrophic algae and their consortia for the production of algal biofuel feedstock in wastewater fed open ponds. S. No. 61/170,683. Docket No. (attorney): 222102-8880; UGARF No. 1454
2. Keshav C. Das, **Ashish Bhatnagar**, Ryan W. Hunt and Senthil Chinnasamy. May 1, 2009. Animal waste derived organic plankton booster as low cost renewable nutrient source for algaculture to produce biofuels. UGARF No. 1455. EFS ID No.: 5257108, Application No. 61174512, Confirmation No. 1076.
3. Senthil Chinnasamy, **Ashish Bhatnagar**, Ryan W. Hunt, Ronald Claxton, Mark Marlowe and Keshav C. Das, 2009. Renewable biomass, biofuel and bioproducts from carpet industry wastewater (treated and untreated) using mixotrophic alga(e).UGARF No. 1453.

**24. Areas of consultancy and income generated:****Proposed Project (International)**

"An Integrated Water Resource Management Approach for a Better Understanding of Climatic and Anthropogenic Hydrologic Fluxes in India" under NSF USA: Dynamics of Coupled Natural and Human Systems (CNH) Program in collaboration with the University of Georgia Submitted in November 2014 Total \$ 395,416

**Income generated:** Nil

**25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad**

1. 09.10.2008 to 09.09.2009 Ashish Bhatnagar. Post Doctoral Research Associateship: Algae production, characterization & conversion at Biorefinery & Carbon Cycling Program, Department of Biological & Agricultural Engineering, The University of Georgia, Athens, USA
2. Dr. Monica Bhatnagar presented paper titled "Wound management using Moringa oleifera seed polymer" at First International Symposium on Moringa held at Manila (Philippines) from 15-18 November 2015.

**26. Faculty serving in****a) National committees****Ashish Bhatnagar**

- 2001-2003 Contributions to National Biodiversity: Strategy and Action Plan (Theme: Microorganisms diversity)
- 2006 National Institute of Science Communication and Information Resources for an e-chapter on Environmental Microbiology for UG students
- Expert Selection Committee in MPPSC
- Evaluator in State level examinations of RPSC

**Project proposals evaluated for**

1. **UGC** major research project: Biomonitoring and phytoremediation of radioactive pollution. PI: Dr. BL. Jagetiya, MLV College, Bhilwara 25.9.2001
2. **Department of Biotechnology, GOI:** DO No. BT/PR6404/BCE/08/ 418/2005 dtd 30.9.2005. Carbon sequestration by Azolla-Anabaena symbiotic system by Dr. S. Thiyagarajan
3. **Department of Science & Technology, Rajasthan** Travel Grant proposal for Banasthali Vidyapeeth, Banasthali
4. **Department of Science & Technology, Rajasthan** Major Research projects of Veena Sharma, Arti Prasad, RK Gothwal, Shilpa Rijhwani, Sonica Saxena, Shruti Mathur and Poonam Narula

5. **Department of Biotechnology, GOI:** Carbon Sequestration and Industrial Wastes Utilization for Biofuels (Biohydrogen and Biodiesel) Production by Microalgal Diurnal Metabolic Cycle Arun and Karupuchamy
6. **The Rajiv Gandhi Science & Technology Commission (RGSTC), Govt of Maharashtra 2014:** Prevalence, awareness and treatment of malnutrition among children in tribal area of Shirpur; Role of students as a community pharmacist for nutrition development in children  
**Monica Bhatnagar**  
**National**  
Expert Selection Committee in MPPSC  
b) **International committees:** Nil  
c) **Editorial Boards:** Nil  
d) **any other (please specify)**

#### **Reviewer for Journals**

**Ashish Bhatnagar**

**National**

1. **Current Science (JIF 0.833) 25.1.14** M.S. 5987-11790-1-RV Adapting technologies for efficient feedstock production from microalgae for biodiesel
2. **The IIS University Journal of Science and Technology 15.4.13** An Evaluation of Physicochemical properties to Assess Quality of Treated Effluents from Jaipur Dairy
3. **Indian Journal of Microbiology (JIF 0.832):** No. 287, raveendran et al., Bacteriological studies in and around Cochin backwaters
4. **International Journal of Seed Spices 4.8.13** MS No. MS-37 Microbiological profile of coriander (*Coriandrum sativum* L.) crop rhizosphere in Rajasthan and screening for auxin producing rhizobacteria
5. **Proceedings of the National Academy of Sciences, India Section B: Biological Sciences 29.6.14** MS No. NASB-D-14-00172 Role of Blue Green Algae in Crop Protection
6. **Proceedings of the National Academy of Sciences, India Section B: Biological Sciences 18.3.13** MS No. NASB-D-13-00057 Scope for Algae Based Ponds for Economical Treatment of Municipal Wastewater
7. **Proceedings of the National Academy of Sciences, India Section B: Biological Sciences 3.2.15** MS No. NASB-D-15-  
**International**
1. **African Journal of Biotechnology 8.2.12** Manuscript Number: 113390 Antibacterial activities of the extracts of cyanobacteria and green algae isolated from desert soil in Riyadh, Kingdom of Saudi Arabia
2. **Algal Research 5.10.14** Manuscript Number: Algal D 14-00204 Naturally floating microalgal mat for in situ bioremediation and potential for biofuel production
3. **Applied Biochemistry and Biotechnology (JIF 1.687) 1.6.13** Manuscript Number: ABAB 1541 Title: Light regime characterization in an airlift photobioreactor for production of microalgae with high starch content
4. **Applied Biochemistry and Biotechnology (JIF 1.687):** Manuscript Number: ABAB-3400. Title: Investigation of metabolite accumulation, morphological and ultrastructural responses of *Chlorella* spp. Exposed to different free chlorine dosages
5. **Applied Energy (JIF 5.261) 20.1.13** Manuscript Number: APEN D12 03254 Application Prospects of Microalgae Cultivation Technology in Comprehensive Utilization of Sewage, CO<sub>2</sub> Emissions and Discharged Heat
6. **Aquatic Biosystems 26.11.12. 8.12.12** Manuscript No. 6506709616770554A preliminary estimation of the algal feedstock production potential of Tampa Bay utilizing carbon dioxide emissions and wastewater effluent

7. **Biological Agriculture & Horticulture 28.2.13** Manuscript No.TBAH-2013-0062 Deciphering the biochemical spectrum of novel cyanobacterium based biofilms for use as inoculants
8. **Bioprocess & Biosystems Engineering (Springer) 5.6.13, 22.6.13:** Manuscript No. BPBSE 130165 Carbon dioxide sequestration and biofuel production using microalgae: A review of current work
9. **Bioresource Technology (JIF 5.039) 1.6.13:** Manuscript No. BITE-D-13-02285R1 FT-IR/ATR Univariate and Multivariate Calibration Models for in situ Monitoring of Sugars in Complex Microalgal Culture Media
10. **British Journal of Applied Science & Technology 5.10.13** MS No. 2013\_BJAST\_7064 Growth of Chlorella sp. On flue gas
11. **Desalination and Water Treatment 22.6.13** Manuscript ID: TDWT-2013-0293 Wastewater valorization adopting the microalgae accelerated growth.
12. **Environmental Monitoring and Assessment 7.1.15** Identification and analysis of polyaromatic hydrocarbons (PAHs)- biodegrading bacterial strains from refinery soil of India
13. **Frontiers in Energy Research 2.10.14** Manuscript No. Design, construction and validation of Internally lit Air Lift Photobioreactor for growing algae
14. **Journal of Agricultural Science & Technology (Iran) 29.7.12:** MS No. J 2684-90. Microalgae harvesting using electroflocculation.
15. **Journal of Applied Phycology (JIF 2.492) 19.2.13** MS No. JAPH-D-13-00038 Effect of water extracts of seaweeds on the growth of seedling roots of buckwheat (*Fagopyrum esculentum* Moench)
16. **Journal of Arid Environments (JIF 1.822) 1.6.13:** JAE08-273 Title: Distribution and community structure of algal species in Gobi desert of Hexi area in China
17. **Journal of Crop Improvement 7.9.12** WCIM 2012 0139 Potential evaluation of *Pseudomonas* for improving phosphorus availability in soil under pearl millet
18. **Saline Systems 30.1.2012** A preliminary estimation of the algal feedstock production potential of Tampa Bay utilizing carbon dioxide emissions and wastewater effluent
19. **Saudi Journal of Biological Sciences 17.10.14** SJBS-D-14-00350 "Improvement of antioxidant and defense properties of Tomato (var. Pusa Rohini) by application of augmented compost
20. **Taylor & Francis book 15.6.12:** Potential Biotechnological Applications of Microalgae: Biodiesel and Value Added Products (Edited by Faizal Bux). Manjinder Singh, Rekha Shukla, Keshav C. Das. Harvesting of Microalgal Biomass

#### Monica Bhatnagar

1. **Journal of Applied Phycology (JIF 2.492) 5.10.13:** JAPH-D-13-00441: Growth and biochemical composition of *Chlorella sorokiniana* in 200 L photobioreactor using ultrafiltration membranes
  2. **Journal of Basic and Clinical Physiology and Pharmacology JBCPP. 2014.** 0104.R1 Immunomodulatory activity of methanolic leaf extract of *Moringa oleifera* in Wistar Albino Rats
  3. **Journal of Pharmacology & Clinical Toxicology (USA)** Antimicrobial Activity of a Commercially Available Plant-based Product
  4. **International Journal of Agricultural Policy and Research 2014:** IJAPR-14-103 Phytochemical Constituents and Bioscreening activities of Green Algae (*Ulva Lactuca*)
  5. **Drug Delivery** MS No. UDRD 2014 0160 A novel Electrospun Membrane based on Moxifloxacin Hydrochloride/ Poly(vinyl alcohol)/ Sodium Alginate for Antibacterial Wound Dressings in practical application
27. **Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).**

Dr. Ashish Bhatnagar attended 3 refresher courses and one orientation course by 2003 While Dr. Monica Bhatnagar attended 1 training, 4 workshops, 1 orientation course, 1 winter school and 2 refresher courses till 2004.

#### Dr. Monica Bhatnagar attended in last five years

S. No.	Programme	Duration	Organized by	Sponsoring Agency
1	National Workshop in Bioinformatics	16.10.12-19.10.2012	Barkatullah University, Bhopal	BU, Bhopal
2	Workshop on Algae Cultivation and Biofuel Production	26.7.13 to 31.7.13	UGC ASC &Algae Biofuel & Biomolecules Centre, MDS University, Ajmer	UGC

#### 28. Student projects

- **Percentage of students who have done in-house projects including inter-departmental projects : 100%**
- **Percentage of students doing projects in collaboration with other universities/industry / institute : Nil**
- **Students of other universities working at MDS University Ajmer for collaborative Research work:**
- Ms. Rashmi Shrivastava from GB Pant University of Agriculture and Technology Pantnagar learnt FAME profiling
- Laxmi Parwani from for M.Sc. Project from Guru Jambheshwar University of Science & Technology Hissar on Removal of fluoride from water using ca treated coal. 2006
- Kishan Bayani from Amity University Jaipur for MSc project in 2012-2013 on "Characterisation of extracellular bacterial polymer"
- Laxmi Parwani from Banasthali Vidyapeeth, Banasthali for Ph.D. (Awarded 2014) on "Prospecting biocompatible carbohydrate biopolymer from desert microorganisms for wound management"

#### 29. Awards/recognitions received at the national and international level

##### National Recognitions of the Department

- 1999 –Department of Biotechnology (Government of India) created SATELLITE CENTRE FOR MICROALGAL BIODIVERSITY IN ARID ZONES OF RAJASTHAN
- 2000- Ministry of Environment & Forests (Government of India) created PROSTHECATE BACTERIA & MICROCOCCUS CENTRE

##### Faculty: Ashish Bhatnagar

##### International:

##### Amongst Top 25 of Science Direct (January to March 2010)

Science Direct listed Microalgae cultivation in a wastewater dominated by carpet mill effluents for biofuel applications. By Chinnasamy, S.; **Bhatnagar, A.**; Hunt, R.W.; Das, K.C. *Bioresource Technology*, 101 (9): 2010:3097-3105 at 16<sup>th</sup> position in *Agricultural and Biological Sciences*

Science Direct: A service for Elsevier Journals with a database of 2500 journals and 11 million users worldwide. Updates its list of top 25 hottest Articles based on number of downloads of an article. It has 236 journals in Agricultural and Biological Sciences.

**Best Paper Award 2013 Third Prize** is awarded by the *International Journal of Molecular Science* (Thompson Reuter ISI Impact Factor 2.339) for the research paper

"Senthil Chinnasamy, Balasubramanian Ramakrishnan, **Ashish Bhatnagar** and Keshav C. Das. 2009. Biomass Production Potential of a Wastewater Alga *Chlorella vulgaris* ARC 1 under Elevated Levels of CO<sub>2</sub> and Temperature. *Int. J. Mol. Sci.*, 10, 518-532; doi:10.3390/ijms10020518". This paper was co-authored by Dr. Ashish Bhatnagar. (In: Ophelia Han 2013. *International Journal of Molecular Science* **Best Paper Award 2013** *Int. J. Mol. Sci.* 2013, 14, 4372-4374; doi:10.3390/ijms14024372)

### National

- 2010 Young Scientist (Bioenergy) award to Dr. Ashish Bhatnagar by Society for Plant Research
- 09.10. 2008 to 09.09.2009 Post Doctoral Research Associate: Algae production, characterization & conversion at Biorefinery & Carbon Cycling Program, Department of Biological & Agricultural Engineering, The University of Georgia, Athens, USA
- 2007 In the reserve list for Commonwealth Academic staff fellowships
- 2007 Selected for Reliance Algae Biofuel Project at Kakinada (Did not join)
- 1989-1993 IARI SRF
- 1989: IARI Gold medal
- 1989 CSIR UGC NET(LS) for Life Sciences
- 1987-89 IARI JRF
- 1987 Bank of Baroda Cash prize for max marks in the university during graduation in economics and agricultural economics subjects
- 1987: Aspee Gold medal for max marks in the university during graduation in plant protection subjects
- 1984-1987: University Merit scholarship

### Awards: Dr. Monica Bhatnagar

#### International

2014 Best Oral Paper award to Dr. Monica Bhatnagar at Global Sustainable Biotechnology Congress 1-5 December 2014 North Maharashtra University Jalgaon

#### National

- 1997 CSIR – UGC NET for JRF in Life Sciences
- 1993-1997 IARI Senior Research Fellowship
- 1994 Indian Council for Agricultural Research NET for SRF and LS in Microbiology
- 1993 IARI Gold medal
- 1991-1993 IARI Junior Research Fellowship

#### • Doctoral/post doctoral fellows: Nil

#### • Students :

**1. Neetu Manglani**, Monica Bhatnagar, Ashish Bhatnagar. Production and optimization of alkaline seine keratinase exhibiting potential dehairing activity. International Conference on Biotechnology: A rendezvous with Basic Sciences for Global Prosperity. 26-27 Dec 2012, New Delhi. Society for Plant Research, New Delhi **2<sup>nd</sup> best poster**

**2. Laxmi Parwani**, Monica Bhatnagar, Ashish Bhatnagar, Vinay Sharma. Potential of gum acacia in wound management: A new Approach. International Conference on Biotechnology: A rendezvous with Basic Sciences for Global Prosperity. 26-27 Dec. 2012. New Delhi Society for Plant Research, New Delhi **3<sup>rd</sup> best poster**

**3. Dr. Hemraj Chhipa** Endeavour postdoctoral fellowship award 2011 Advanced Functional nanomaterials Group, School of Applied Sciences, College of Science, Engineering and Health, RMIT University, Melbourne (VIC) 3001 Australia

4. **Laxmi Parwani**, Monica Bhatnagar, Ashish Bhatnagar, Vinay Sharma. Biocompatible polymers from desert cyanobacteria for wound management. International Conference on Microorganisms in Environmental Management and Biotechnology, July 1-3, 2011. Barkatullah University, Bhopal **Young Scientist award (3<sup>rd</sup>)**.
5. **Laxmi Parwani**, Monica Bhatnagar, Ashish Bhatnagar, Vinay Sharma. A novel wound dressing based on gum acacia. International Conference on Green Chemistry 7-9.12.2011. Central University Rajasthan, Kishangarh **3<sup>rd</sup> best poster paper**
6. **Mr. Bhupendra Verma** joined **Indian Institute of Science**, Bangalore for Ph.D.
7. **Mr. Rishiraj Chhipa** stood amongst the first 100 in CSIR JRF test
8. **Ms. Sapna Jha** published her M.Sc. dissertation work in the international journal- **Biotechnology Letters (JIF 1.736)**.

Besides faculty has been invited for presentation of papers in several international and national conferences/seminars/workshops/ symposia (Appendix IV)

### 30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

#### Trainings/Workshops (National) (last 5 years)

1. **The Diversity of Desert Bacteria**. 12-13.3.2012 Prosthete Bacteria & Micrococcus Centre, Department of Microbiology, Ajmer. **MOE & F** (Rs.35000/-) Dr. B Ramakrishnan, IARI N Delhi, Dr. Vijaylatah Medical College Ajmer, DR. OP Aiswath National research Centre for Spice Seeds, Tabeezi Ajmer, Dr. M Krishnamohan BISR Jaipur, Dr. S Dutta, Dr. A Bhatnagar, Dr M Bhatnagar MDS University Ajmer

2. **Algae Cultivation and Biofuel Production** (26-31 July 2013) **UGC Academic Staff College, MDS University Ajmer**(~Rs. 2.0 lakh)

The workshop was the **first in the University** that had One scientist from the UN's International Centre for Genetic Engineering and Biotechnology, New Delhi, two professors from IITs, two professors from IARI, New Delhi, one CSIR emeritus scientist along with experts from University of Rajasthan, Central University of Rajasthan, Birla Institute of Scientific Research and MDS University Ajmer as its resource persons. The participants too were represented by National Institute of Technology Durgapur and Hamirpur, National Botanical Research Institute, Gujarat Vidyapeeth, Universities of Madras, Karnataka, Gujarat and Mumbai besides those of the state of Rajasthan.

3. **Workshop on Small Enterprises in Microbiology** 15-16 February 2016. Funded by **UGC** (Rs. 75000/-). The workshop was organized at MDS University facility for algae cultivation and in the village Bhunaboy. Experts included Dr. Radha Prasanna, Principal Scientist, Indian Agricultural Research Institute New Delhi and Prof. Monica Bhatnagar for the production of Blue Green Algae biofertilizer, Prof. G.N. Mathur, Director, Krishi Vigyan Kendra Ajmer for the cultivation of Azolla as animal feed, Dr. Pravin Puranik, North Maharashtra University, Jalgaon and Prof Ashish Bhatnagar for production of Spirulina as a food supplement and Dr. Arora from Krishi Vigyan Kendra and Monica Bhatnagar for the production of



Figure 1 Prof. A. Bhatnagar, Prof. K. Sodani, Vice Chancellor, Dr. R. Prasanna, IARI, Prof. GN Mathur KVK Tabeeji at the inaugural function of Workshop on Small Enterprises in Microbiology

Vermicompost. Total 85 persons including 39 rural youth from 13 districts of Rajasthan, 8 teachers, 5 research

scholars, 1 retired agricultural officer, 1 medical officer and 31 students of the University were trained in the cultivation of Spirulina as Superfood crop, Azolla as animal feed and Cyanobacterial biofertilizer and vermicomposting for organic agriculture on 15-16 February 2016 at the Department of Microbiology.

### Conference (International)

- Ashish Bhatnagar. Convener. 4<sup>th</sup> Biennial International Conference on Entrepreneurship, Tourism, Environment & Energy on 11-12.10.2014. Entirely funded by the Centre for Entrepreneurship and Small Business Management of the MDS University, Ajmer. Prof. Dinesh Goyal, Thapar University, Patiala; Dr. B. Ramakrishan, Principal Scientist, IARI, N. Delhi; Dr. Senthil Chinnasamy Chief Technology Officer, Aban Infrastructure Ltd. Prof Nimit Chaudhary, IITM, NOIDA; Prof. Monika Prakash, IITM Gwalior and representations from Dubai, Czeck Republic, Delhi, Himachal Pradesh, Chhattisgarh, Madhya Pradesh, Andhra Pradesh, Maharashtra and Karnataka.

### 31. Code of ethics for research followed by the departments :

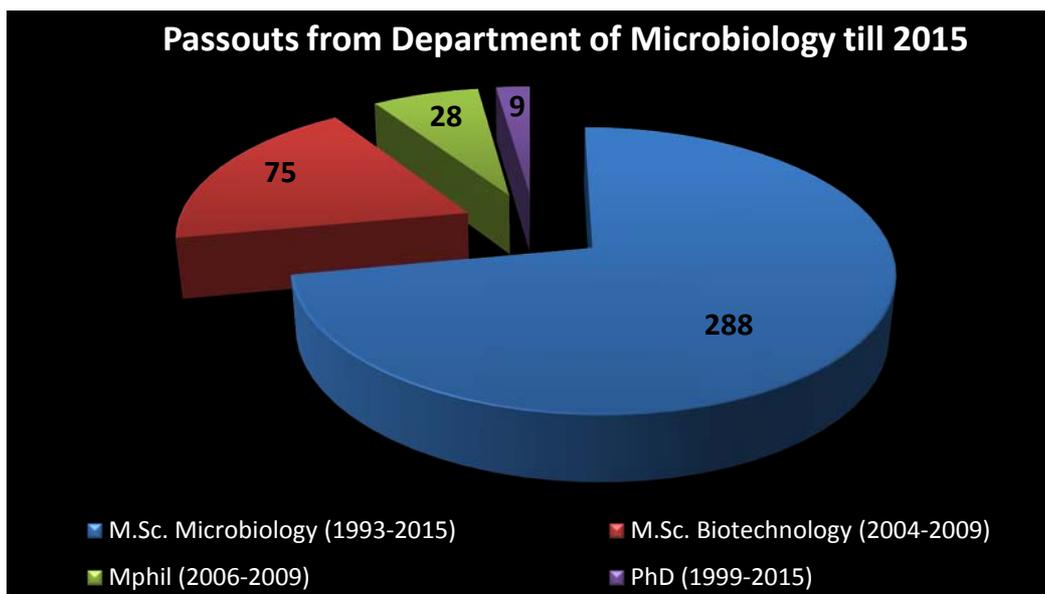
Students for MSc and PhD are asked to go through the Laboratory safety norms of the Department of Microbiology and Bioethics and Biodiversity norms of the Government of India and ethics in research conduction and communication.

The students in M.Sc. and Ph.D. have to sign an Undertaking that they have read the guidelines for Working in Microbiology Laboratories and shall abide with them and will be responsible for any carelessness. Similarly before beginning Project/Research work they have to submit an Affidavit declaring that

- they would take utmost care in following work ethics, norms of laboratory safety, publishing ethics and the national norms related to bioethics and biodiversity.
- That in case the outcome of the project work is presented or published in full, the names and the order of the authors will be finalized by the teacher advisor on the basis of the contribution to the research outcome in terms of intellectual input (important suggestions, guidance, criticism, analyzing the results, discussing them and drawing conclusions) and conduction of research work.
- That they would maintain two hard and one soft copy(ies) of their research work, wherein any intellectual contribution made by them in terms of novel idea will be recorded in both hard copies duly countersigned by their supervisor and one hard and one soft copy of raw data and records will be submitted to the Supervisor at the Department of Microbiology at MDS University, Ajmer and one hard copy to the Head of the Department in order to ensure his/her claim as one of the authors in case any manuscript/presentation/patent/copyright carries this information.

### 32. Student profile programme-wise:

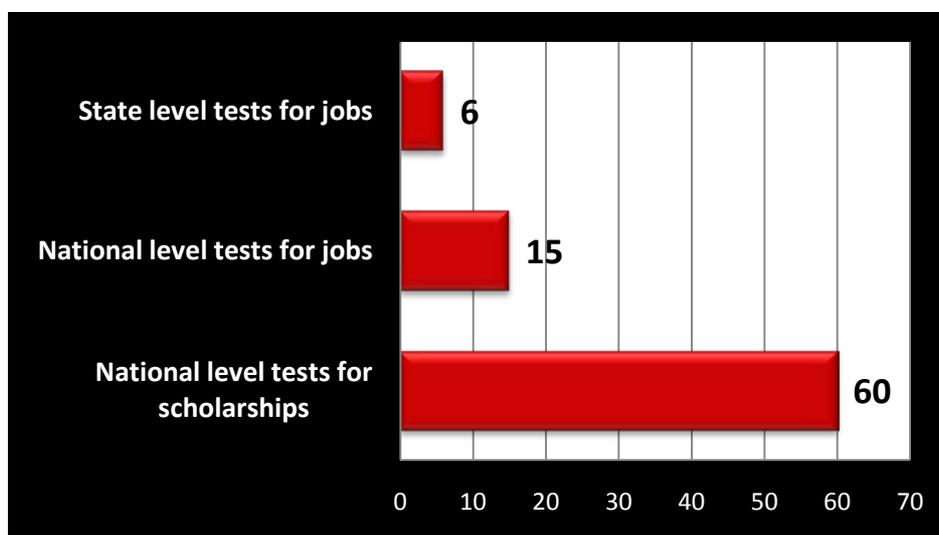
Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Microbiology (last 5 years)	Avg 65	51.6%	48.4%	98.5%	99.5%
Ph.D. (Research Entrance Test of the University held in 2010 and 2011)	Avg 17.5			100%	100%



### 33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the state	% of students from universities outside the state	% of students from other countries
M. Sc. Microbiology (Average of last 5 years)	54.4%	42%	3.6%	Nil
Ph.D.	50%	10%	40%	Nil

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. 75 (18.75%) qualified National level exams (NET JRF 22, NET LS 10, GATE 10, Bank PO 6, ICAR NET 4, SLET 3, ICMR NET 2, GRE 2 IISc Entrance 1, PO 6, RPSC 4, Air Force 2, CDSE 1, Others 2 (Appendix V)

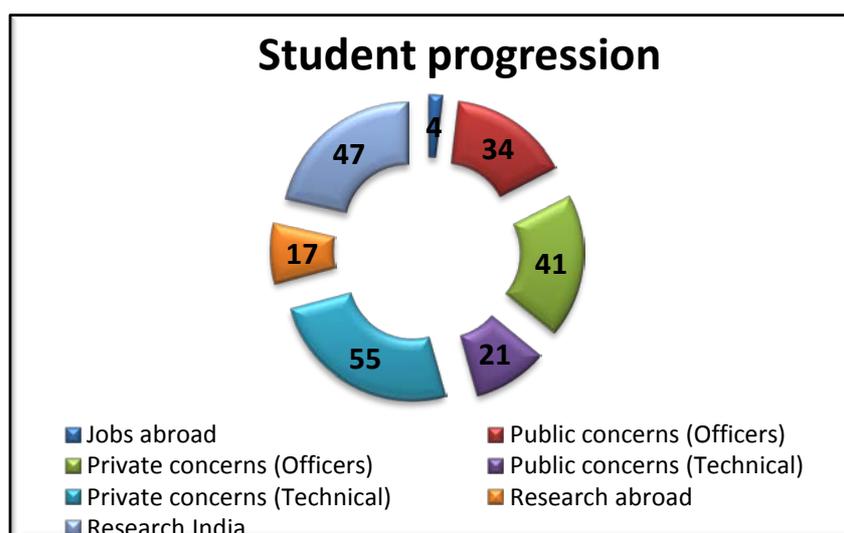


## 35. Student progression (Appendix VI)

Student progression	Percentage against enrolled	
UG to PG	Not applicable	
PG to M.Phil.	0%	
PG to Ph.D.	2.5%	
Ph.D. to Post-Doctoral	0%	
Employed	Campus selection	Nil
	Other than campus recruitment	17.6%
Entrepreneurs	Nil	

## 36. Diversity of staff

Percentage of faculty who are Graduates	
of the same university	Nil
From other universities within the state	Nil
From Universities from other states	100%
From universities outside of the country	Nil



37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period: None

38. Present details of departmental infrastructural facilities with regard to

- Library:** 40 books, mainly manuals; Journals (Current Science & Phykos)
- Internet facilities for staff and students:** Available
- Total number of class rooms:** One + One lab cum classroom
- Class rooms with ICT facility:** One
- Students' laboratories:** Two (One Environmental Microbiology Laboratory (Heavy Duty Refrigerated Centrifuge, Autokjeldahl Digestion & Distillation Unit, Fumehood))



**Figure 2 Facilities at the Department of Microbiology**

- f) **Research laboratories:** Processing Lab (Millipore water unit for HPLC grade water, Refrigerated Centrifuge, Densitometer), Biofuel Lab (Gel Doc, UV Vis Double Beam Spectrometer, Gas Chromatograph with FID, CO<sub>2</sub> incubator, Brookfield Viscometer), Microbial Biodiversity & Biochemistry Lab (lyophilizer, BOD Incubators, Serological Incubators, Water baths, Ovens and Serological Incubators), Molecular Biology Lab (HPLC with PDA and RID, ELISA Reader, Biolog, Thermocycler and Gradient Thermocycler, Oxitop BOD system), Microscopy room (Microscopes, Ultrasonicator, FTIR Spectrometer, Inverted and Upright Fluorescence Microscopes, Phase Contrast Microscope), Growth room and Inoculation Room (Laminar Air Flows, Photoperiodic racks, incubator shaker and Gyrotory shaker)

### 39. List of doctoral, post-doctoral students and Research Associates

- a) **from the host institution/university:** Ph.D. Ms. Rekha Rani
- b) **from other institutions/universities:** Post Doc: Dr. Neha Sharma under Woman Scientist Scheme of Department of Science & Technology, Government of India, Mentor: Dr. Ashish Bhatnagar  
Ph.D.: Ms. Monika Kumari  
Ms. Harshita Sharma  
Ms. Prerena Sharma

### 40. Number of post graduate students getting financial assistance from the university: 4

- Professional Faculty Fund Scholarship One each in M.Sc. Previous and Final every year
- Smt Jaganbai Mayadevi Scholarship one each in M.Sc. Previous and Final every year

### 41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:

No. But the faculty realized that the number of applicants seeking admission had declined in last three years. This on internet searches appeared a global phenomenon showing overall drop of students in science. Yet the faculty introspected and studied course curricula of various institutions at home and abroad. This made it realize that it could further improve the product by starting an adjunct Diploma in Quality Assurance in Pharmaceutical & Food Industry for the continuing students of M.Sc. Microbiology and M.Sc. Food & Nutrition which is intended to begin from 2015-16.

**42. Does the department obtain feedback from:**

- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? No
- students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? No
- alumni and employers on the programmes offered and how does the department utilize the feedback? No

**43. List the distinguished alumni of the department (maximum 10)**

1	Manish Sharma	Lecturer (Microbiology), Texas State University San Marcos. USA. Earlier CDRI Lucknow, PDF Gainesville, Florida USA
2	Sarvesh Soni	Research Scientist, RMIT University Melbourne Australia
3	Bhanwar Singh Charan	Flight Lieutenant, Air Force
4	Annie P. Jacob	Pilot Officer, Indian Air Force
5	Manohar Lal Choudhary	Scientist at National Institute of Virology, Pune Earlier JNTU JRF, NII PDF,
6	Mukesh K. Meghwanshi	Scientist D, DRDS, Defense Research Laboratory, Tezpur
7	Pradeep Verma	Professor, Central University of Rajasthan
8	Sanjay Pareek	Vice President, Quality control, Vikas WSP Ltd. Shri Ganganagar
9	Jainendra Jain	Operation Specialist, Biobig Healthcare Solutions Pvt Ltd, Chandigarh
10	Ritu Chauhan	Manager, Regulatory Affairs, Bharat Serums and Vaccines Limited Earlier: Dy. Manager Reliance Life Science, Mumbai

**44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts.**

Students of M.Sc. and Ph.D. at Microbiology Department participated in all trainings and workshops organized in the Department that are depicted at point 30.

**Atreya Series of Lectures** After *Atreya* –the physician in *Takshashila*, who inspired *Charak Samhita* about Indian Medicinal System. He was born at Panchanad of Kashmir during *Kanishka's* period. *Atreya* taught *Agnivesh* who in turn was the guru of *Charak*.

**Tenth lecture:** Dr. B. Ramakrishnan Microbiology Division IARI N Delhi Pumping iron: what do bacteria and archaea gain from? 12.3.2012

**Eleventh lecture:** Prof. Suparna Mukherjee, Centre for Environmental Science and Engineering, IIT Mumbai. Biofuel from Algae and Sustainability Considerations 26.7.2013

**Twelfth lecture:** Senthil Chinnasamy Biotechnology Division, Aban Infrastructure Pvt Ltd, Chennai Biofuels from Algae: Opportunities and Challenges in Technology Commercialization 11<sup>th</sup> October 2014

**45. List the teaching methods adopted by the faculty for different programmes.**

- **Microsphere:** <https://microsphere.wooqer.com/loginRegister.do#> A platform provided by Wooqer to deliver presentations (powerpoint and video) to the students, obtain assignments, provide literature and extra teaching material to the students. (Appendix VII)
- E-content development: *Ashish Bhatnagar*. 2008 Natural and xenobiotic compounds in the environment- Transformation, bioaccumulation and biomagnification in air, water and soil. In: E-book: Environmental Microbiology for graduate students by National Institute of Science Communication and Information Resources.
- Chalk-board, interactive board, visualizer
- Socratic seminar

- Power point presentations
- Student seminars to develop presentation skills
- Library hours
- Tracking and site seeing for aquatic, lithic and edaphic microflora. Showing students features like microbiotic crusts, rock varnish, lichens, biofilms, wood rot fungi, root nodules, rhizosheath, algal flocks, micro crustacean and microphyte blooms etc.
- Open laboratory 24x7
- Hands on Experience: Short term projects in three semesters and long term project in fourth semester.

#### 46. How does the department ensure that program objectives are constantly met and learning outcomes are monitored?

Following are the Motto and Mission of the Department of Microbiology:

##### **Motto**

##### **'Unveil the hidden strength'**

We desire to expose the students to their hidden talents and emphasize on their improvement and also to unearth our subject that deals with organisms not visible to the naked eye.

##### **Mission**

The department of microbiology (DoM) at MDS University, Ajmer aims to quench the curiosity about life of organisms invisible to the naked eye. Small components are the most vital and potent parts of any system and so are microorganisms for the planet earth. Knowledge about this microcosmos shall impart deeper understanding of the life as a whole. It answers how life is sustained (evolution), whether there is life on other planets (exobiology), how do the microorganisms live (cell biology, physiology and genetics), how many different types of microorganisms are there (biodiversity), what is their role, how do they interact with other beings and what are the extremes of their life (biogeochemical cycles-ecology) and whether man can utilize them for his benefit and for the continued existence of life on earth (biotechnology, industrial, agricultural, environmental, medical, food, water and air microbiology).

##### **Strategies to fulfil the motto and mission:**

- Course curriculum and pedagogy take into consideration the mission of the Department challenging students with assignments and internal evaluation
- Exposing to the Microsphere (Web based platform) based supplementary teaching that supplies lectures and soft copies of extra reading material. It also helps self evaluation by the students to assess themselves, the faculty in turn gets informed whether the lectures have been read by each student and assignments have been submitted by them. The tool forces the students to become computer friendly.
- Observing power is emphasized in local excursions to look for microbial geomorphic features and they are forced to discuss possible sampling methods and conservation of such material.
- Personality build up: Wall magazine: ZoomIn and Atreya Series of Lectures by Eminent Researchers, Industrialists and Alumni help in building up the personality. Promoting query, develop presentation skills through Student Seminars, Biotic Brain Storming Sessions for group discussions and write ups of project work/ dissertations also add up.
- Social responsibility: Madhavkar awareness campaign as at point 48 assist in the overall personality build up of the students.
- Developing attitude for Research: The research programs especially desert microbiology, microbial ecology, microbial biodiversity, desiccation and salt tolerance, bioprospecting, bioremediation and biosorption and bioenergy and biofuel too work towards meeting the

goals of the mission.

- Learning management of the laboratories: Duties are assigned in rotation to manage germplasm collection cell, laboratories, lecture rooms, algae cultivation zone to help students hone their management skills.

**47. Highlight the participation of students and faculty in extension activities.**

Students work for the society through the **NSS**. They are encouraged to participate in the **blood donation camps**. **Madhavkar Awareness campaign** also arranges for inspirational lectures and poster exhibits for awareness in the society.

**Lectures in the NSS camps:** Faculty has been invited to deliver lectures on AIDS in NSS camps (1.12.2010, 9.12.2012)

**48. Give details of “beyond syllabus scholarly activities” of the department.**

- **Awareness campaign:** Emergent viral diseases: Bird Flu, Swine Flu and Ebola Fever
- **Touring** local streams for algal collections and microbiological features such as rock varnish, cryptobiotic crusts, algal flocs.
- **Participation in student seminars, workshops, training** etc.
- **ZoomIN:** Wall magazine; Day's word, Day's definition
- **Madhavkar series of awareness campaigns:** After Madhavkar-the physician of 8-9<sup>th</sup> century. He was son of Indukar and wrote *Rugvinishchaya* (study of diseases) or *Madhavnidan*.

**Fourth Awareness Campaign:** Emergent Viral Diseases Poster Exhibits cum Seminars 8-9.1.2015

- **Management of the germplasm collection and laboratories:** Students are made in charge of laboratories and germplasm collection in rotation making them responsible and learn laboratory management.
49. **State whether the program/department is accredited/ graded by other agencies? If yes, give details.**No
50. **Briefly highlight the contributions of the department in generating new knowledge, basic or applied.**
- **Resource Centre:** Germplasm collection of desert microorganisms: Maintain 59 strains of cyanobacteria and algae, 21 strains of bacteria
  - **Mechanism deciphered**
    1. Resistance of green algae and susceptibility of cyanobacteria to fluoride (Fluoride, Folia Microbiologica, IJM)
    2. Survival mechanisms against thermal stress in desert algae are triggered when undergoing matric stress and not osmotic stress (IJA).
    3. ROS control by the biopolymers of Acacia, Moringa and Cyanobacteria might be contributing to a quicker healing of wounds (IJPPS, JAP)
  - **Techniques developed**
    1. First to indicate possibility for biosorptive removal of fluoride that generated a series of papers by Venkat Mohan *et al.* (Fluoride, Biotech Lett)
    2. Developed a novel method of interactive biosorption for anion (as fluoride) removal (Biotech Lett)
    3. Using mixotrophic algae to grow in eutrophic wastewaters for remediation and produce Biofuel (US patent filed)

4. Use of Carpet industry wastewater for polishing the treated wastewater and producing feedstock for Biofuel (US patent filed)
5. Using fog to cultivate algae (US patent granted)
6. Using poultry litter as a cheap source of nutrient to cultivate algae. (US patent filed)
7. Synthesized cyanobacterial exopolymer based hydrogel dressings that could heal the wounds faster (CP) (Applying Indian patent)

- **Management cues provided**

1. Fitted r- and K-selection model to the waste stabilization pond process implicating that the closed agitated bioreactors must use single celled organisms and semi natural remediation ponds shall use a consortium that utilizes all spatial niches (JEB)
2. Plant diversity in deserts needs to be conserved for conservation of cyanobacterial diversity (JAE)

- **Discovered**

1. Mixotrophic strains of *Chlorella minutissima*, *Scenedsmus bijuga* and *Chlamydomonas globosa*
2. *Chlorella minutissima* from wastewater- as a versatile and potent remediation agent\* (Book, Applied Biochemistry & Biotechnology)
3. Majority of lithophytic cyanobacteria produce emulsifying molecules (turbidity at 30' varied from 11-37% of 0 min) (2008, ms under preparation)
4. Wound healing polymers in cyanobacteria
5. Wide spread fluoride tolerance in cyanobacteria and green algae (IJM)
6. Biosorptive removal of fluoride by cyanobacteria (Fluoride, biotech Lett) and fungi (International Journal of Bioassay)
7. Cyanobacteria are more susceptible to fluoride than green algae (Fluoride)
8. Physical disintegration and dissolution of limestone by edaphic cyanobacteria (NSCNF)
9. Three ecological indicator species (Book)
  1. *Spirulina laxissima* for alkalinity
  2. *Oscillatoria angustissima* for eutrophy
  3. *Aphanothece nidulans* for acidity
10. Rajasthan is a big treasure house of 185rabica185nous, filamentous and heterocystous cyanobacteria (JAE)
11. Low species richness of cyanobacteria but habitat variation even at short local scale adds more and more new forms (JAE)
12. Vegetated soils show better cyanobacterial diversity index than the barren ones (JAE)
13. Saline playas show high algal-cyanobacterial productivity (JABU)
14. Bioprospecting in the desert and saline playas may yield industrially/ agriculturally utilizable biomaterial
15. CO<sub>2</sub> increase ameliorates effect of thermal stress in *Chlorella vulgaris* (ABB)
16. Biopolymer from Moringa pods and cyanobacteria can be used to prepare wound dressings
17. Chlorophyll a is a deceptive parameter to determine survival under desiccation (IJA).
18. A true osmophile: *Chroococcus cohaerens* (2412) from Thar (IJA)
19. *Anabaena variabilis* produces a multi utility thixotropic exopolymer showing good flocculent ability, emulsifying ability, antibacterial activity and good thermal stability (JAP)

- **First reports (India)**

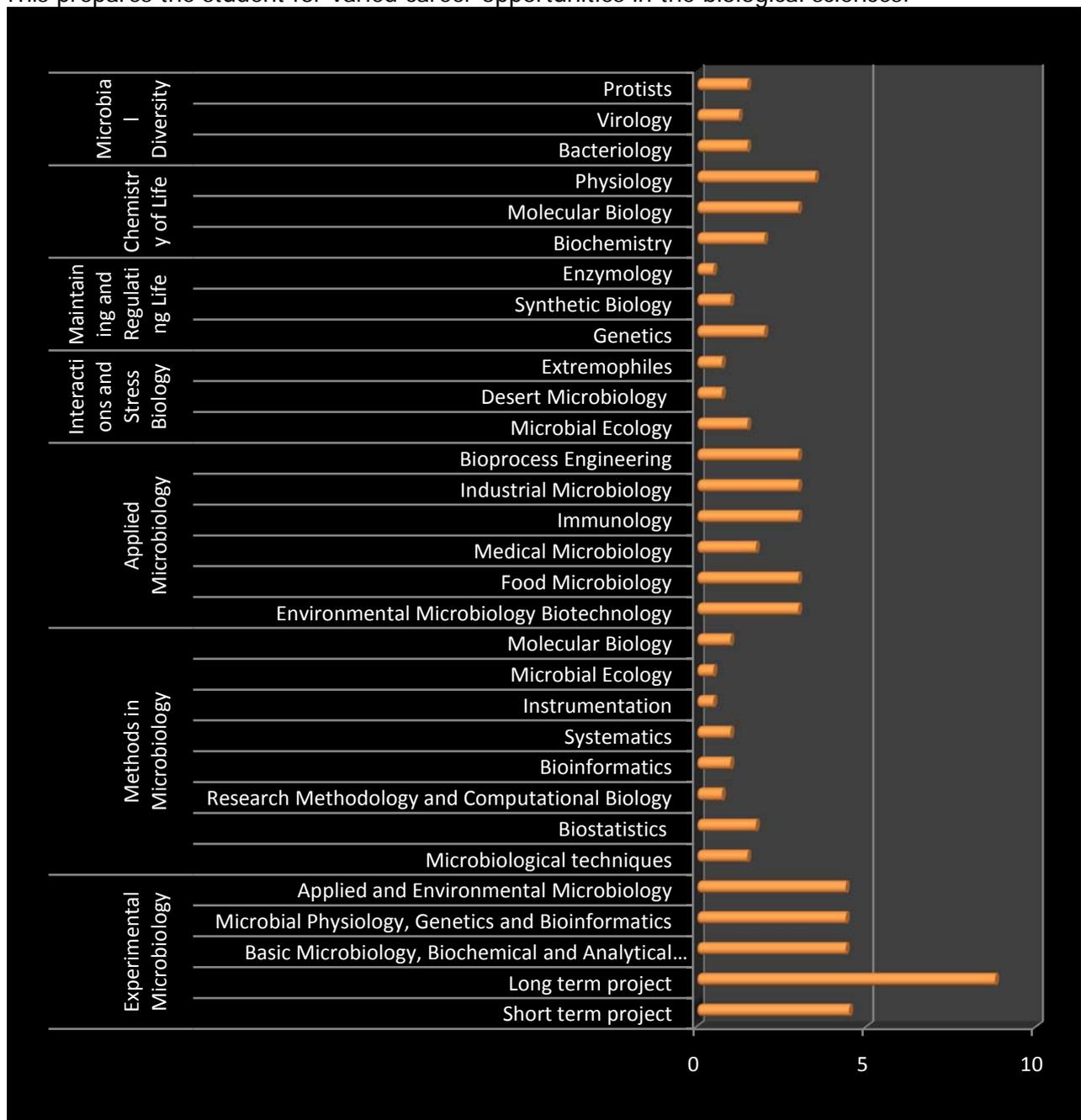
1. First attempt in India to model (Stochastic) prediction of algal turnover in WSP system, Wazirabad (Book chapters 1998,1999, Book, ABB)
2. Estimate of morphotypic diversity of cyanobacteria in Thar desert (JAE), saline playas (JABU) and exposed rock surfaces and outcrops

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

**Major strengths:**

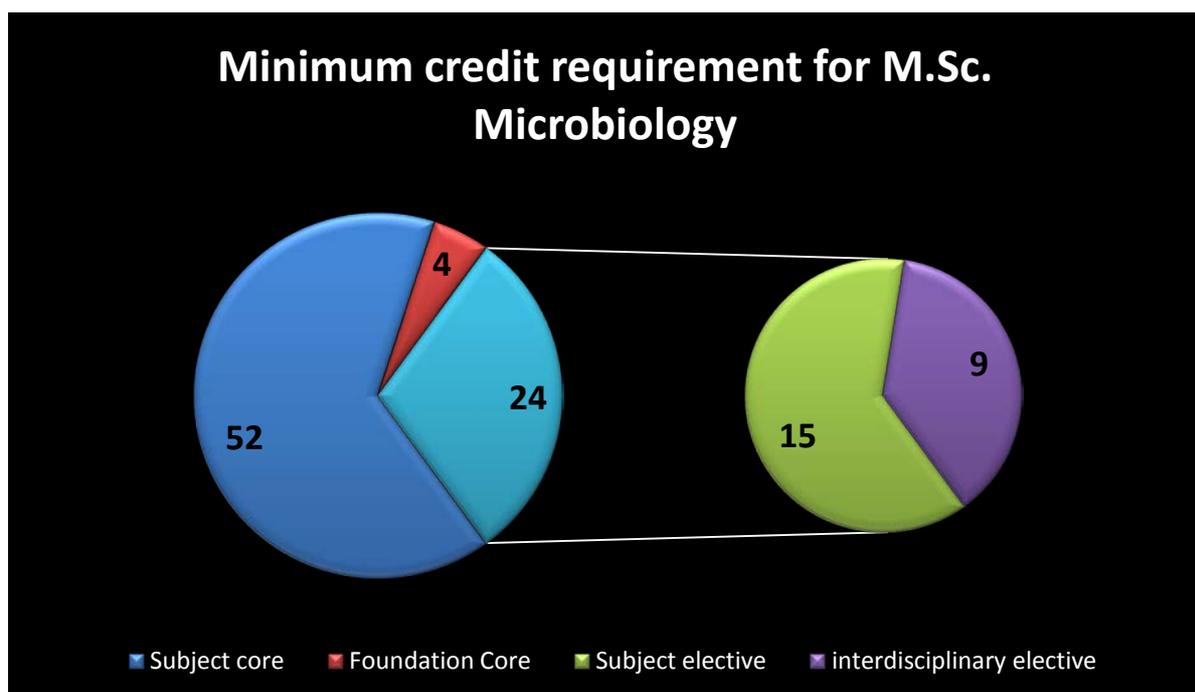
- **Course design** of M.Sc. Microbiology deals with the invisible but innumerable living entities (See appendix X). It imparts deeper understanding of the life as a whole and answers -how diverse microorganisms are and how are they studied? -how is life sustained (chemistry of life), maintained, regulated and manipulated? -what is their role, how do they interact with other beings and what are the extremes edges of life and -whether man can utilize them for his benefit and for the continued existence of life on earth (biotechnology, industrial, agricultural, environmental, medical, food, water and air microbiology).

This prepares the student for varied career opportunities in the biological sciences.



Weightage given to various subjects/skills in the M.Sc. Microbiology

- **Learning by Doing:** Approximately 38% course stresses on experimental training involving class experiments, short term projects and one long term project, another 11% is about the theoretical aspects of experimental methods of microbiology and related fields while rest covers the theoretical part. This intense grooming on experimental aspects makes a student versatile enough to join any field of microbiology, biotechnology and molecular biology.
  - **Academic interests of the faculty:** The faculty members have a strong academic background of IARI. Their bent for research, innovations, inventions and discoveries generate a sense of pride in the students and inspire them to work, as a result the laboratories remain open beyond office hours.
  - Besides **activities** as mentioned at points 45-48 help build up confidence and overall personality of the students.
  - First University in the state of Rajasthan that began M.Sc. Microbiology in 1993 with faculty groomed in Microbiology.
  - Faculty is available 24x7 for students' queries and support in experimentation and projects.
- **Modular course**  
**M.Sc. Microbiology is a modular program of learning with exit points after each semester.** Student is allowed to opt out of the Programme after successful completion of minimum 20 credits of Semester I, with PG Certificate in Basic Microbiology, 40 credits of Semesters I and II with PG Diploma in Advanced



Microbiology, 60 credits of Semesters I, II and III, he/she will be awarded Advanced PG Diploma in Applied Microbiology and 80 credits of Semesters I, II, III and IV, he/she will be awarded M.Sc. in Microbiology. Such a student, if willing, is permitted to get lateral entry into the Programme within a period of maximum two years to complete the Master's Degree.

There is also a provision of Certificate of specialization or skills learnt (in 8 fields) based on successful completion of a minimum of 9 credits in a specific skill or field of specialization (See Appendix VIII).

### Weaknesses

- Lack of Faculty
- Difficult handling of specializations other than those of the two permanent faculty members
- Time constraint does not allow sufficient time to the faculty for publication and preparing grant proposals that affects external funding.

### Opportunities

- **Location of the University:** The University is located in the semi arid and arid ecotone in the foothills of one of the oldest hill ranges of the world- the Aravallies. Beyond the hill range lies the desert providing excellent opportunities to learn about the challenges that microorganisms face.
- Curiosity for cryptobiosis or the phenomenon of resurrection in microorganisms lead to the discovery of –an osmophilic cyanobacterium,-essentiality of absence of water (sensing metric water stress) to trigger desiccation tolerance mechanisms and enhancement of cyanobacterial biodiversity by the plants are some of the interesting facts discovered by us by being in the vicinity of the desert.
- City having multitude of ecosystems viz., wetlands and ponds (Anasagar, Phoyasagar, Foolsagar, Makadwali pond etc), rainfed streams, rocky hills, agricultural fields (Tabeezi), anthropological extremes (Eutrophic waterbodies, largest marble mandi in Asia (Kishangarh)and second largest poultry industry) and natural extremes (sand dunes, fluoride containing water). A terrain that is worth exploiting its biotechnological potential. For the students it shows physical features of microbial communities such as desert varnish, patina on the archeological monuments, rhizosheath, cryptobiotic crusts, biofilms and algal mats).

### Challenges

- The opportunities themselves through the challenge to study the diversity of organisms, discover their mechanisms for sustenance and then exploit them for the management of the ecosystem and economic welfare of man.
- Lack of interest in children towards science has reduced both quality and quantity of the students in M.Sc.
- Mushrooming of substandard private colleges and universities has also reduced the quality of graduate teaching that is affecting overall quality of the M.Sc.
- Students and parents do not have awareness on how to rate an institution for their studies and get trapped in nearest college or beautiful college syndrome.
- Many aspirants for M.Sc. have never entered in laboratories in their life

## 52. Future plans of the department

The department of microbiology foresees its future in **The School of New Biology** at the University that would encompass a cafeteria approach for studies in biological sciences having departments of Microbiology, Biochemistry, Molecular Biology & Biotechnology, Biochemical Engineering, Bioinformatics, Biofuels and Bioenergy, Energy and Environmental Engineering, Biostatistics, Clinical Research & Diagnostics in collaboration with Departments of Food Science & Nutrition and Environmental Sciences and having PG courses in all except the subjects of Engineering. The School would include two centres of interdisciplinary research, namely the Centre for Desert Biology and the Algae Biofuel & Biomolecules Centre. This approach would reduce the number of total faculty to a mere 39 (instead of 55) (See the table below) that are needed to appoint to run 1 UG and 9 PG courses as compared to that of having independent departments running these courses in isolation.

## FACULTY REQUIREMENT OF SCHOOL OF NEW BIOLOGY IN CAFETERIA APPROACH

S. No.	Course (M.Sc.)	Faculty required			Specializations desired
		Prof	Asso P	Asstt P	
1	Microbiology	1	2	3	Bacteriology (1), Mycology (1), Algology/Cyanobacteriology (1), Ferm Tech/Biochem Engg (alcohol and biogas) (1), Proteomics/Genomics (1)
2	Alternative energy and Biofuels	1	1	3	Agronomy (1), Algae (1), Ferm Tech/Biochem Engg (alcohol and biogas) (1), Microbiology/Engineering Microbial Fuel Cell (1), Chemistry/Biochemical Engineer (lipid conversion to oil) (1), Algae Genetic Engineering for Biofuel (1), Mech Engg (Solar and/or wind energy) (1)
3	Diagnostics & Clinical Research	-	2	2	Medical Microbiology/Pathology (1), Radiology (1), Immunology (1), Biostatistics (1), Clinical research (1)
4	Biotechnology	-	1	2	Plant/Microbial Biotechnology (1), Animal Biotechnology (1), Animal /Human Biochemistry (1), , Algae Genetic Engineering for Biofuel (1)
5	Biochemistry	-	-	2	Plant Biochemistry (lipid conversion to oil) (1), Bacterial Biochemistry (1)
6	Bioinformatics	-	-	2	1. Programming and management of biological databases, 2. Drug/macromolecule designing
7	Synthetic Biology		1	2	Computational Biology (Boolean algebra, Graph theory, Differential equations) (1), Biochemical engineering (1), Algae/Plant Genetic Engineering for Biofuel (1)
8	Nanotechnology	1	2	3	1. Nanomaterials, 2. Nanometal chemistry, 3. Microelectronics, 4. Nanobiotechnology, 5. Nanotribology
9	Biostatistics & Computational Biology	1	1	3	Biostatistics (2), Computer Science-Programming (2), Computational Biology (Boolean algebra, Graph theory, Differential equations) (1)
10	BSc Biology Integrated			9	Chemistry (3), Botany – taxonomy (1), Zoology –taxonomy (1), Environmental Science (1), Biochemistry (1), Microbiology (1), Biotechnology (1) Environmental Science (1)
<b>Total (39 in place of 55)</b>		4	10	25	16 less

## Appendix I

### Alternative teaching arrangements in Microbiology Department

S. No.	2014-15	2015-16
Guest Faculty		
1	Dr. Poonam Mohan	Dr. Poonam Mohan
2	Dr. Neha Sharma	Ms. Priyanka
3	Dr. Vivek Sharma	Ms. Akanksha Mehta
Adjunct Faculty		
1	Dr. Praveen Mathur*	Dr. Ritu Mathur
2	Dr. Subroto Dutta*	Dr. Shiv Dayal Singh
3	Dr. Ritu Mathur	
4	Dr. Shiv Dayal Singh	

\*Are part of CBCS program from 2015-16

## Appendix II

### Academic collaborations

1. Dr. Stephen Pointing of the Hongkong University for molecular diversity of desert microorganisms including cyanobacteria.
2. Dr. Chris A. Joseph, Department of Anthropology and Prof. KC Das, Department of Biological & Agricultural Engineering, the University of Georgia, Athens, USA on Traditional knowledge on water resources, their sustenance and conservation.
3. Dr. Subramanya Rao, Taiwan University, Taiwan
4. Prof. T. Satyanarayana, Delhi University South Campus, New Delhi.
5. Prof. Anjana Sharma, Deptt of Biosciences, RD University Jabalpur
6. Dr. M. Krishnamohan, Biotechnology Division, Birla Institute for Scientific Research, Jaipur for studies and conservation of algal and cyanobacterial diversity of Rajasthan, a joint project has been submitted to DST Rajasthan.
7. Dr. Radha Prasanna Microbiology Division, IARI, New Delhi
8. Dr. Ramakrishnan Microbiology Division, IARI, New Delhi
9. Dr. Jhuma Ganguly Department of Chemistry, Bengal Engineering and Science University, Shibpur, Howrah, WB, India for Structural analysis of the exopolysaccharides
10. Prof. Vinay Sharma, Department of Biotechnology, Banasthali Vidyapeeth, Banasthali for animal trials

### Appendix III Publications by the Faculty (since 2010)

#### International Journals

#### Ashish Bhatnagar

S. No	Title and Journal, volume with page nos.	ISSN /ISB N No.	Journal impact factor (Thompson Reuter)	SJR	H index	SNI P	Citations Google scholar
1	<i>Ashish Bhatnagar</i> , Monica Bhatnagar, Senthil Chinnasamy and K. C. Das. 2010. <i>Chlorella minutissima</i> —A Promising Fuel Alga for Cultivation in Municipal Wastewaters. <b>Applied Biochemistry &amp; Biotechnology</b> 161 (1) : 523-536. Springer.	0273-2289	1.735	0.76	65		109
2	Senthil Chinnasamy, <i>Ashish Bhatnagar</i> , Ryan W. Hunt and K.C. Das. 2010. Microalgae cultivation in a wastewater dominated by carpet mill effluents for biofuel applications. <b>Bioresource Technology</b> 101: 3097–3105. Elsevier.	0960-8524	4.494	2.476	152	2.463	305
3	Senthil Chinnasamy, <i>Ashish Bhatnagar</i> , Ronald Claxton and K.C. Das. 2010. Biomass and bioenergy production potential of microalgae consortium in open and closed bioreactors using untreated carpet industry effluent as growth medium. <b>Bioresource Technology</b> 101: 6751-6760. Elsevier.	0960-8524	4.494	2.476	152	2.463	82
4	Ryan W. Hunt, Senthil Chinnasamy, <i>Ashish Bhatnagar</i> , K.C. Das. 2010. Effect of biochemical stimulants on biomass productivity and metabolite content of the microalga, <i>Chlorella sorokiniana</i> . <b>Applied Biochemistry &amp; Biotechnology</b> 162:2400-2414. Springer.	0273-2289	1.735	0.76	65		22
5	<i>Ashish Bhatnagar</i> , Senthil Chinnasamy, Manjinder Singh, K.C. Das. 2011. Renewable biomass production by mixotrophic algae in the presence of various carbon sources and wastewaters. <b>Applied Energy</b> 88 (11): 3632-3635. Elsevier.	0306-2619	5.613	3.385	67	3.262	113
6	Viswanathan T., Mani S., Das KC, Chinnasamy S and <i>Bhatnagar Ashish</i> 2011. Drying characteristics of a microalgae consortium developed for biofuels production. <b>Transactions of the American Society of Agricultural and Biological Engineers</b> 54 (6), pp. 2245-2252. ASABE, USA.	2151-0032		0.600	68		2
7	Bhatnagar M, Pareek S, Ganguli J, <i>Bhatnagar A</i> 2012 Rheology and composition of a multi-utility exopolymer from a desert borne cyanobacterium <i>Anabaena variabilis</i> . <b>Journal of Applied Phycology</b> 2012, 24(6): 1387-1394. Springer.	0921-9871	2.559	0.88	56		5

6	T Viswanathan, S Mani, KC Das, S Chinnasamy, A Bhatnagar, RK Singh, M Singh. 2012. Effect of cell rupturing methods on the drying characteristics and lipid compositions of microalgae. <b>Bioresource Technology</b> . 126 (2012):131–136. Elsevier	0960-8524	4.494	2.476	152	2.463	6
9	Chhipa, H; Acharya, R; Bhatnagar, Monica; Bhatnagar, Ashish. 2013 Determination of sorption potential of fermentation industry waste for fluoride removal. <b>International Journal of Bioassays</b> . 2 (3): 568-574. Ebioscholar Korea	2278-778x	4.32 Ind Cop				
10	Parwani, L; Bhatnagar, M; Bhatnagar, Ashish; Sharma, V. 2014. Antioxidant and iron-chelating activities of cyanobacterial exopolymers with potential for wound healing. <b>Journal of Applied Phycology</b> . 26 (3), 1473-1482 Springer	0921-8971	2.559	0.88	56		2
11	Bhatnagar, Ashish; Bhatnagar, M; Garg, MK. 2014. Solid Surfaces Alleviate Thermal Stress in Desert Microalgae. <b>International Journal on Algae</b> . 16 (1): 68-85. Begell House Inc. Danbury Connecticut	1521-9429		0.15	4		
12	Bhatnagar, M; Parwani, L; Sharma, V; Ganguly, J; Bhatnagar, Ashish. 2014. Exopolymers from <i>Tolypothrix tenuis</i> and three <i>Anabaena</i> sp.(Cyanobacteriaceae) as novel blood clotting agents for wound management. <b>Carbohydrate Polymers</b> . 99: 692-699. Elsevier	0144-8617	4.074	1.373	97	1.936	7
	Total		31.757	15.336	934	12.587	653

### Monica Bhatnagar

S. No.	Title	ISSN/ ISBN No.	Journal impact factor (Thompson Reuter)	SJR	H index	SNIP	Google Scholar Citations
1	Ashish Bhatnagar, <b>Monica Bhatnagar</b> , Senthil Chinnasamy and K. C. Das. 2010. <i>Chlorella minutissima</i> —A Promising Fuel Alga for Cultivation in Municipal Wastewaters. <b>Applied Biochemistry &amp; Biotechnology</b> 161 (1) : 523-536 Springer.	0273-2289	1.735	0.76	65		109
2	<b>Bhatnagar M</b> , Pareek S, Ganguli J, Bhatnagar A 2012 Rheology and composition of a multi-utility exopolymer from a desert borne cyanobacterium <i>Anabaena variabilis</i> . <b>Journal of Applied Phycology</b> 2012, 24(6): 1387-1394. Springer.	0921-9871	2.559	0.88	56		5
3	Chhipa, H; Acharya, R; <b>Bhatnagar, Monica</b> ; Bhatnagar, Ashish. 2013 Determination of sorption potential of fermentation industry waste for fluoride removal. <b>International Journal of Bioassays</b> . 2 (3): 568-574. Ebioscholar Korea		4.32 Ind Cop				
4	Parwani, L; <b>Bhatnagar, M</b> ; Bhatnagar, Ashish; Sharma, V. 2013. Antioxidant and iron-chelating activities of cyanobacterial exopolymers with potential for wound healing. <b>Journal of</b>		2.559	0.88	56		2

	<b>Applied Phycology</b> . 26 (3), 1473-1482 Springer						
5	Bhatnagar, Ashish; <b>Bhatnagar, M</b> ; Garg, MK. 2014. Solid Surfaces Alleviate Thermal Stress in Desert Microalgae. <b>International Journal on Algae</b> . 16 (1): 68-85. Begell House Inc. Danbury Connecticut			0.15	4		
6	<b>Bhatnagar, M</b> ; Parwani, L; Sharma, V; Ganguly, J; Bhatnagar, Ashish. 2014. Exopolymers from Tolypothrix tenuis and three Anabaena sp. (Cyanobacteriaceae) as novel blood clotting agents for wound management. <b>Carbohydrate Polymers</b> . 99: 692-699. Elsevier		4.074	1.373	97	1.936	7
	Total		10.927	3.163	278	1.936	121

#### National Journals

S. No.	Title and Journal, volume with page nos. Publisher	ISSN/I SBN No.	Journal impact factor (Thompson Reuter)	SJR	H index	SNIP	Google Scholar Citations
1	Rajneesh Prajapat, <i>Ashish Bhatnagar</i> , Rajarshi Kumar Gaur, Vivek Bajpai 2010. Fluoride Removal from water by Sorbing on Plant and Fungal Biomass. <b>International Journal of Biological Technology</b> (2010) 1(1):43-46. Gayathri Teknological Research & Publications	0976-4313	Nil				4
2	Mohammad Basha Makandar, <i>Ashish Bhatnagar</i> 2010 Morphotypic diversity of microalgae from arid zones of Rajasthan (India). <b>Journal of Algal Biomass utilization</b> 1 (2): 74-92. Phycospectrum, Chennai.	2229-6905	Nil				6
3	Mohammad Basha Makandar, <i>Ashish Bhatnagar</i> 2010 Morphotypic diversity of microalgae from freshwater bodies of Jodhpur Rajasthan (India). <b>Journal of Algal Biomass utilization</b> 1 (3): 54-69. Phycospectrum, Chennai.	2229-6905	Nil				5
4	Laxmi Parwani, Monica Bhatnagar, <i>Ashish Bhatnagar</i> , Vinay Sharma. 2012. Reactive oxygen species control by plant biopolymers intended to be used in wound dressings. <b>International Journal of Pharmacy and Pharmaceutical Sciences</b> (2012) 4(5):506-510	0975 – 1491		0.48	17		2
5	Sharma, R; Chahar, OP; Bhatnagar, Monica; <i>Bhatnagar, Ashish</i> . 2013. Impact of osmotic stress and temperature on pigments and proteins of Anabaena strains. <b>Journal of Environmental Biology</b> . 34 (5): 941-943. Triveni Enterprise India		0.560	0.34	24		2
6	Bhatnagar, Monica; Parwani, L; Sharma, V; Ganguli, J; <i>Bhatnagar, Ashish</i> . 2013 Hemostatic, antibacterial biopolymers from Acacia arabica (Lam.) Willd. And Moringa oleifera (Lam.) as potential wound dressing materials. <b>Indian Journal of Experimental Biology</b> . 51 (10):		0.560	0.44	49		5

	804-810. NISCAIR India						
7	Monica Bhatnagar, S Pareek, <i>Ashish Bhatnagar</i> , J Ganguly. 2014. Rheology and characterization of a low viscosity emulsifying exopolymer from desert borne <i>Nostoc calcicola</i> . <b>Indian Journal of Biotechnology</b> . 13:241-246. NISCAIR India		0.386	0.27	17		
8	Pointing SB, Rao S, Chan Y, Bugler-Lacap DC, <b>Bhatnagar Ashish</b> , Bhatnagar Monica 2015 Microbial diversity in soil, sand dune and rock substrates of the Thar monsoon desert, India. <b>Indian Journal of Microbiology</b> , Springer published online	0046-8991	0.899	0.35	19		
	Total	2.405	1.88	126	0	20	2.405

### Monica Bhatnagar

S. No.	Title	ISSN/ ISBN No.	Journal impact factor (Thomson Reuter)	SJR	H index	SNI P	Google Scholar Citations
1	Laxmi Parwani, Monica Bhatnagar, <i>Ashish Bhatnagar</i> , Vinay Sharma. 2012. Reactive oxygen species control by plant biopolymers intended to be used in wound dressings. <b>International Journal of Pharmacy and Pharmaceutical Sciences</b> (2012) 4(5):506-510	0975 - 1491		0.48	17		2
2	Sharma, R; Chahar, OP; Bhatnagar, <b>Monica, Bhatnagar</b> ; Ashish. 2013. Impact of osmotic stress and temperature on pigments and proteins of Anabaena strains. <b>Journal of Environmental Biology</b> . 34 (5): 941-943. Triveni Enterprise India		0.560	0.34	24		2
3	<b>Bhatnagar, Monica</b> ; Parwani, L; Sharma, V; Ganguli, J; Bhatnagar, Ashish. 2013 Hemostatic, antibacterial biopolymers from <i>Acacia arabica</i> (Lam.) Willd. and <i>Moringa oleifera</i> (Lam.) as potential wound dressing materials. <b>Indian Journal of Experimental Biology</b> . 51 (10): 804-810. NISCAIR India		0.560	0.44	49		5
4	<b>Monica Bhatnagar</b> , S Pareek, Ashish Bhatnagar, J Ganguly. 2014. Rheology and characterization of a low viscosity emulsifying exopolymer from desert borne <i>Nostoc calcicola</i> . <b>Indian Journal of Biotechnology</b> . 13:241-246. NISCAIR India		0.386	0.27	17		
5	Pointing SB, Rao S, Chan Y, Bugler-Lacap DC, Bhatnagar Ashish, <b>Bhatnagar Monica</b> 2015 Microbial diversity in soil, sand dune and rock substrates of the Thar monsoon desert, India <b>Indian Journal of Microbiology</b> , Springer published online	0046-8991	0.899	0.35	19		
	TOTAL		2.405	1.88	126	0	9

### Chapters in Books

**International publications****Ashish Bhatnagar**

S. No	Title with page nos. Book Title, editor & publisher	ISSN/ ISBN No.
1	Monica Bhatnagar, <i>Ashish Bhatnagar</i> . 2010. Assessing algal potential to remove fluoride by biosorption. In: Protocols on Algal and Cyanobacterial Research. Bagchi SN, Kleiner D. and Mohanty P. (eds). <b>Alpha Science International, UK</b> and Narosa International Pub., New Delhi.	10: 184265-5841
2	Monica Bhatnagar, <i>Ashish Bhatnagar</i> , Senthil Chinnasamy & K.C. Das. 2011. Curbing eutrophication by growing mixotrophic algae for biofuel feedstocks. In: Algae Biofuels. Subodh Bhatnagar (Ed). <b>Studium Press, LLC, Houston, USA</b> pp. 327-337.	978-93-80012-44-5
3	Monica Bhatnagar & <i>Ashish Bhatnagar</i> . 2015. Wound dressings from algal polymers. In: Marine Algae Extracts: Processes, Products, and Applications, Se-Kwon Kim and Katarzyna Chojnacka (Ed). Wiley-VCH Verlag GmbH & Co. KGaA. pp 523-556.	

**Monica Bhatnagar**

S. No	Title with page nos. Book Title, editor & publisher	ISSN/ ISBN No.
1	<b>Monica Bhatnagar</b> , Ashish Bhatnagar. 2010. Assessing algal potential to remove fluoride by biosorption. In: Protocols on Algal and Cyanobacterial Research. Bagchi SN, Kleiner D. and Mohanty P. (eds). <b>Alpha Science International, UK</b> and Narosa International Pub., New Delhi.	10: 184265-5841
2	<b>Monica Bhatnagar</b> , Ashish Bhatnagar, Senthil Chinnasamy & K.C. Das. 2011. Curbing eutrophication by growing mixotrophic algae for biofuel feedstocks. In: Algae Biofuels. Subodh Bhatnagar (Ed). <b>Studium Press, LLC, Houston, USA</b> pp. 327-337.	978-93-80012-44-5
3	<b>Monica Bhatnagar</b> & Ashish Bhatnagar. 2015. Wound dressings from algal polymers. In: Marine Algae Extracts: Processes, Products, and Applications, Se-Kwon Kim and Katarzyna Chojnacka (Ed). Wiley-VCH Verlag GmbH & Co. KGaA. pp 523-556.	

**\*Gene sequences submitted at NCBI**

1-10. Chhipa, H., Bhatnagar, M., Goswami, Pawas and Bhatnagar, Ashish. 2009. Characterization of Gram positive cocci from Rajasthan GQ290212-21.

11-21. Bhatnagar M., Chhipa H., Goswami P. and Bhatnagar Ashish. 2010. Diversity of Gram positive cocci in semi arid region of Rajasthan, India HM 595364-74

22-26. Chhipa, H., Bhatnagar, M., Goswami, P. and Bhatnagar, A. 2010. 16S ribosomal RNA sequence analysis of environmental bacterial isolates from semi arid region of Rajasthan HM 803960-64.

27. Manglani N, Bhatnagar M., Farkiya S. and Bhatnagar Ashish. 2011. JN409994

28. Manglani N, Farkiya S, Bhatnagar M. and Bhatnagar A. 2011. JN409995

29. Manglani N, Bhatnagar M., Farkiya S. and Bhatnagar Ashish. 2011. JN409996

## Appendix IV

### Invited Lectures and session Chairmanships

S. No.	Title of Lecture/ Academic Session	Title of Conference/ Seminar etc	Organized by
1	Ashish Bhatnagar. Revisiting Biofuel Options for a thirsty, hungry and dark earth. 27.8.2009	Fall 2009 Seminar	Graduate Faculty of Engineering, University of Georgia, Athens
2	Ashish Bhatnagar. Face of the new Sciences: Play with the atoms and solve the systems puzzle	27-31.12.2011 article invited for Souvenir	19 <sup>th</sup> National Children's Science Congress, Jaipur
3	Ashish Bhatnagar. Why Taxonomy?	12.3.2012. Workshop on Microbial Diversity & Desert Microbiology.	Prosthecate Bacteria & Micrococcus Centre, MDS University, Ajmer
4	Ashish Bhatnagar. Bacterial Taxonomy: Whither thou goest?	13.3.2012. Workshop on Microbial Diversity & Desert Microbiology.	Prosthecate Bacteria & Micrococcus Centre, MDS University, Ajmer
5	Ashish Bhatnagar. Numerical Taxonomy	Workshop on the Diversity of Desert Bacteria (12-13.3.2012)	Prosthecate Bacteria & Micrococcus Centre, Microbiology Deptt, MDS University Ajmer
6	Ashish Bhatnagar. Alternative Energy & Fuels	11.7.2012 PGT Training for Jawahar Navodaya Vidyalaya	Govt TT College Ajmer
7	Monica Bhatnagar Experimental protocols for school level microbiology 11.7.2012	विज्ञानविषयाधारितअभिनवनप्रशिक्षणकार्यगोष्ठी (७-१३.७.२०१२)	Govt Teachers' Training College, Ajmer
8	Ashish Bhatnagar. Energy, Innovation & Enterprise	2012 Refresher course on Commerce	CESBM, MDS University Ajmer
9	Ashish Bhatnagar. Academic Performance Based Appraisal System	2012 Refresher course on Commerce	CESBM, MDS University Ajmer
10	Ashish Bhatnagar. Acquired Immune Deficiency Syndrome.	9.12.2012	National Service Scheme, MDS University, Ajmer
11	Ashish Bhatnagar Gooley business: Dark waters hold bright future for algae biofuel	International Conference on Biotechnology: A rendezvous with basic sciences for global prosperity 26-27.12.12	Society for Plant Research
12	Ashish Bhatnagar Dark is not Drab: Mixotrophic cultivation system for simultaneous algae biofuel production and wastewater remediation	International Conference on Algal Biorefinery (ICAB 2013) 11-12.1.2013	IIT Kharagpur
13	Monica Bhatnagar. What ails education	National Seminar on Educational reforms and economic development in 21 <sup>st</sup> century 24-25.1.2013	UGC and Shri Pragya Mahavidyalaya, Bijainagar
14	Monica Bhatnagar Alternative Energy	Orientation program 31.1.2013	UGC ASC MDS University Ajmer
15	Ashish Bhatnagar. What ails education	Orientation course 28.1.2013	UGC ASC MDS University Ajmer
16	Ashish Bhatnagar Bringing up a breathless civilization: Wastewater remediation, biofuel and biorefinery	National Seminar on water and sewage management 5-7 March 2013	UGC and Deptt of Environmental Science, MDS University Ajmer

17	Ashish Bhatnagar. Evaluation of research publications with reference to ailing education in India	Special Summer School 25.5.2013	UGC ASC MDS University Ajmer
18	Ashish Bhatnagar Diet of algae	Workshop on algae cultivation and biofuel production 26-31.7.2013	UGC ASC and Algae Biofuel & Biomolecules Centre, MDS University Ajmer
19	Ashish Bhatnagar Ugly and Algae: Bioremediation and Biorefinery	Workshop on algae cultivation and biofuel production 26-31.7.2013	UGC ASC and Algae Biofuel & Biomolecules Centre, MDS University Ajmer
20	आशीष भटनागर: स्फिरुलिना	Farmers Training Program (Crop diversification through seed spice for higher production and productivity) 7-11.2.2014	National Research Centre for Spice Seeds, Tabeeki, Ajmer Rajasthan
21	Ashish Bhatnagar "Algae Biofuels: The Gooley Business"	National Conference on Recent Trends and Future Prospects of Microbiology and Biotechnology (3-4 March 2014)	JJT University, Jhunjhunu
22	Ashish Bhatnagar: Fuels & Fears for the Environment	World Environment Day 5.6.2014	Department of Environmental Science, MDS University Ajmer
23	Ashish Bhatnagar Biofuels	28 Jan 2015	Centre for Excellence, Government College, Ajmer
24	Ashish Bhatnagar Fuels in the Filth	2 <sup>nd</sup> February 2015 One day Symposium on "Biofuels : An alternative and non conventional energy source for future"	Sukshmjeev The Society of Department of Microbiology, Bhaskaracharya College of Applied Sciences, Delhi University Delhi under DBT Star College Scheme
25	Monica Bhatnagar. Wound management using Moringa oleifera seed polymer	First International Symposium on Moringa and VIth National Moringa Congress 15-18 November 2015 Manila	International Society for Horticultural Science, Asian Vegetable Research & Development Centre, Moringaling, Central Philippines University, Farm Systems International Organization, held at Manila
26	Ashish Bhatnagar, Monica Bhatnagar. Spirulina, as an aquatic crop	Winter School on Utilization of degraded land and soil through horticultural crops for improving agricultural productivity and environmental quality 3-23 December 2015	National Research Centre for Spice Seeds, Tabeeki
27	Monica Bhatnagar, Ashish Bhatnagar. Moringa oleifera, a supercrop for drylands		

## Appendix V

### Students who qualified National level tests

#### CSIR UGC NET for JR Fellowship in Life Science

1. Mukesh Kumar Garg 2001
2. Rishi Raj Chhipa OBC 2002
3. Rajesh Soni 2002
4. Parul Mehra 2002
5. Sanjaya Khandelwal 2002
6. Sarvesh Soni OBC 2002
7. Satish Vedi SC 2002
8. Gautam Meghvanshi SC 2002
9. Manohar Chaudhary OBC
10. Arshad Khan 2003
11. Anand Jain 2003
12. Jitendra Mathuria 2003
13. Anil Dangi OBC 2003
14. Sapna Jha 2003
15. Bhupendra Varma, SC 2003
16. Jaspreet Singh 2003
17. Renu Yadav 2004 (Education)
18. Shipra Jaiswal 2009, 2010
19. Parakam Singh Chauhan 2009, 2010
20. Sarvesh Yadav 2010
21. Preeti Verma 2011
22. Vinod Kumar 2012

#### ICAR NET for LS in Microbiology

1. Rajesh Soni
2. Parul Mehra
3. Arvind Dungarecha
4. Vinod Kumar 2012

#### ICMR JRF

1. Manohar Chaudhary
2. Arvind Dungarecha

#### GATE

1. Sarvesh Kumar Soni
2. Vishnu Bansal
3. Arvind Kumar Megh
4. Charu Gujral
5. Durgesh Soni 2004, 81.81 percentile
6. Monica shrama 83 percetile
7. Parakram Singh Chauhan 2008, 2009 94.62 percentile (300 rank)
8. Shipra Jaiswal 2009
9. Sarvesh Yadav 2010
10. Preeti Verma 2011

#### CSIR-UGC NET for Lecturership

1. Vishnu Bansal
2. Rajendra Panwar
3. Sapna Jha
4. Dharmesh Harwani
5. Pradeep Verma
6. Bhawna Poonia

7. Devendra Chaudhary
8. Anil Dangi
9. Arshad Khan
10. Arvind Megh
11. Khushboo Shivashish Haver 2016

#### GRE

1. Sanjaya Khandelwal
2. Sonia Panchhi 2006 Also TOEFEL

#### SLET Life Science (Rjasthan)

1. Abhishek Vashishtha 2006
2. Shipra Jaiswal 2010
3. Neelam Sharma 2010
4. Vinod Jeengar 2013

#### PhD Entrance for Indian Institute of Science

1. Bhupendra Verma

#### UGC BSR Meritorious StudentScholarship

1. Deependra Singh Shekhawat 2011

#### CDSE

1. Abhinav Goyal 2010 qualified in 2011 for IMA-DIE

#### Air Force Pilot Officer

1. Bhanwar Singh Charan 2005
2. Annes P. Jacob 2009

#### Probationary Officer

1. Sunil Jeph
2. Suraj Bhan Pawaria Canara Bank 2007
3. Om Prakash Mehra Central Bank of India
4. Pooja Udenia Bank of Baroda
5. Sanjay Kumar Rohilla Union Bank of India 2007
6. Subhash Chand Meena Branch Manager, Bank of India, Indore 2010
7. Subhash Kumawat, Bank of Baroda, 2010
8. Ramniwas Chahar, UCo Bank 2010
9. Poonam Yadav, Bank of Baroda, Bikaner 2010

#### RPSC

1. Jaishree Naruka
2. Deepti Mishra
3. Maneeta Singh Rathore
4. Bhavna Poonia

#### State Pollution Control Board

1. Abhi Garg

#### State Forensic Science Department

1. Rakesh Roshan

## Appendix VI

## ALUMNI PROFILE

S. No	Name	Position held	Batch year
<b>Holding important portfolios abroad</b>			
1	Manish Sharma	Lecturer (Microbiology), Texas State University San Marcos Earlier CDRI Lucknow, PDF Gainesville, Florida USA	1998
2	Sarvesh Soni	Research Scientist, RMIT University Melbourne Australia	2009
3	Pooja Gupta Beotra	Education Department, Rockhampton, Queensland, Australia	1998
4	Jitendra Mathuria	Associate Professor, ML College of Medical Sciences, Pokhara, Nepal	2002
<b>Holding important portfolios in Public concerns</b>			
1	Bhanwar Singh Charan	Flight Lieutenant, Air Force	2005
2	Annie P. Jacob	Pilot Officer, Indian Air Force	2009
3	Manohar Lal Choudhary	Scientist at National Institute of Virology, Pune Earlier JNTU JRF, NII PDF,	1999
4	Mukesh K. Meghwanshi	Scientist D, DRDS, Defense Research Laboratory, Tezpur	
5	Dr. Pradeep Verma	Associate Professor, Central University of Rajasthan	
6	Dharmesh Harwani	Asstt Professor, MGS University Bikaner Earlier: Deptt. of Botany, MDS University, Ajmer, IISc PDF,	2002
7	Gautam Meghvashi	Asstt Professor, MGS University Bikaner Earlier: DU South campus for PhD	2001
8	Abhishek Vashishtha	Asstt Professor, MGS University Bikaner Earlier: Lecturer, NIMS, Jaipur,	2003
9	Chandraveer Charan	Lecturer, CDFST at MP Univ Agric Tech Udaipur	
10	Pankaj Gupta	Bharat Biotech. Ltd., Hyderabad, NII, Program Manager (Grants) Research Development Office, NC Biol Sci Bengaluru	1999
11	Vimlendu Pandey	Manager, Quality control at MINISTRY OF FOOD PROCESSING INDUSTRIES, GOVT OF INDIA, New Delhi Earlier: Defence Laboratory, Jodhpur, NABL, N Delhi	1997
12	Renu Yadav	Assistant Professor, Dept. of Education, Central University of Haryana	2002
13	Rakesh Roshan	Sr. Scientific Officer, Forensic Science Department, Kota Earlier: Lecturer, MN Institute of Applied Sciences, Bikaner,	2003
14	Sunita Chauhan	National Kumarappa Handmade Paper Research Institute, Jaipur	1997
15	Abhi Garg	Junior Scientific Officer, Rajasthan Pollution Control Board	2010
16	Deepti Singh Rathore	Microbiologist at National Test House, Ministry of Consumer Affairs Earlier: M.Phil. MDS University,	2006
17	Ajay Chandel	Lab Officer at BIS, MUMBAI Earlier: Coca-Cola, Jaipur,	2000
18	Ashutosh Verma	Microbiologist, FICCI, New Delhi	1998
19	Pooran Kumar	LIC Sujangarh	2006
20	Juhi Mahawar (BT)	Hindustan Zinc, Udaipur	2007
21	Surajbhan Pawaria (BT)	Agriculture Officer, Canara Bank	2006
22	Om Prakash Mehra	Branch Manager at Central Bank of India	
23	Pooja Udenia	Bank of Baroda	
24	Sanjay Kumar Rohilla	Assistant Manager at Union Bank Of India Earlier: Hindustan Zinc, Udaipur	2007
25	Subhash Meena	Branch Manager, Bank of India, Indore	2010
26	Chandrakant Sen	Rajasthan State Cooperative Bank- Apex Bank	
27	Jaishree Naruka	SDM, Sanganer	1997
28	Deepti Mishra	RAS, Rajasthan State Excise Office, Ajmer	1997
29	Maneeta Singh Rathore	RAS, Naseerabad	
30	Divakar Joshi	MEDICAL AND HEALTH SERVICES, RAJASTHAN Lab. Technician, Banasthali Vidyapeeth, Banasthali	2002
31	Rajani Meghwal	Lab Technician in Tuberculosis Department under FIND Project at KAMLA NEHRU STATE TB TRAINING & DEMONSTRATION CENTER,	2011

		AJMER	
32	Subhash Kumawat	Bank of Baroda,	2010
33	Ramniwas Chahar	UCo Bank	2010
34	Poonam Yadav	Bank of Baroda, Bikaner	2010
	<b>Holding important portfolios in Private concerns</b>		
1	Sanjay Pareek	Vice President, Quality control, Vikas WSP Ltd. Shri Ganganagar	1999
2	Jainendra Jain	Operation Specialist, Biobig Healthcare Solutions Pvt Ltd, Chandigarh	1996
3	Vishal Sharma	Millipore	1999
4	Ekta Chopra	Ranbaxy Pvt. Ltd., New Delhi	1997
5	Manish Bhatnagar	J. Mitra Diagnostic Pvt.Ltd., New Delhi	1997
6	Ritu Chauhan	Manager, Regulatory Affairs, Bharat Serums and Vaccines Limited Earlier: Dy. Manager Reliance Life Science, Mumbai	2006
7	Jeet Singh Khushdil	Technical Application Scientist at Thermo Fisher Scientific	1998
8	Shweta Sharma	Microbiologist, Vikas WSP Ltd. Shri Ganganagar	1999
9	Aroop Chatterjee	Glaxo, Marketing division, Kolkata	2002
10	Ramesh Chouhan	Redico Pvt.Ltd., Ringas	1997
11	Bitthal Lavania	Bush foods overseas Earlier: Coca-Cola, Jaipur	1999
12	Abhiman Sagar	Cadilla Pharma, Ahmedabad, QC	2006
13	Dinesh Kumawat	Manager, Quality control at SACH Herbotech	2005
14	Ghanshyam Dhakar	CottonConnect	
15	Bhavani Singh Jhala (BT)	Asst. Manager QARD at SHPL, Jodhpur	2006
16	Amit Sukhwal	Microbiologist, Sun Pharma Biotech, Pepsico International	2005
17	Ronak Dholiya	Microbiologist, Sun Pharma, Ahmedabad	2007
18	Durgesh Soni	Sun Pharma Vadodara	
19	Badal Nagar	Microbiologist, Dabur Pharma, Tonk	2005
20	Shikha Jhanwar	Microbiologist, IPCA, Mumbai	2006
21	Dinesh Yadav	Dy.G M at J.M. EnviroNet Pvt. Ltd.	
22	Neeraj Sharma	Microsoft, Earlier: Dabur	
23	Pavan Ora	BSI, Chandigarh	
24	Mahendra K. Chauhan (BT)	Fertilizer Company, Bagru, QC Executive at Bericap India	2006
25	Harish Chandra Singh (BT)	QC Dabur, Delhi	2007
26	Moola Ram (BT)	Usha Remedies, Andheri	2007
27	Anshuj Sharma	IPCA Laboratories	
28	Balbir Chhimpia	Asst. Manager QA at Amoli Organics Pvt.Ltd Padra	
29	Vijay Sharma	SABMiller Gwalior	
30	Hemraj Chhipa	Res Associate, TERI N Delhi	
31	Ramesh Solanki	Food Safety Executive at SPL Baroda Earlier: Akshaya Patra, Jaipur,	2007
32	Anil Kumar (BT)	Microbiologist, Agri Biotech, Ajitgarh	2007
33	Manoj Kumar Sahu	Microbiologist, HAB Pharma Mumbai	2007
34	Mahammad Basha Makandar	Kumar Organic Products Limited	
35	Vinod Jeengar	Admin at we the microbiologist, india	
36	Ravindra Kumar (BT)	QC Pharma, Bangalore Central Warehousing Corporation	2006
37	Sanjay Rai Parsoiya	Rajasthan Rajya Vidyut Prasaran Nigam Ltd; QC, Agri Biotech, Ajitgarh,	2007
38	Sweetie Goyal	Unicon Investment Solution	
39	Dharmesh Sharma	Fidelity International	
40	Gopal Kumawat	General provident fund office, Churu	
41	Gaurav Verma	Muthoot Group	
	<b>Students in Research in International Laboratories</b>		
1	Pradeep Verma	Prague, Czeck Republic	1996
2	Pavitra Sah	New Jersey, USA	1996

3	Vertika Mahobia	Marburg University, Germany	1997
4	Parul Mehra	Special Centre for Molecular Medicine, JNU, New Delhi, PDF Philadelphia USA	1998
5	Rajesh Soni	Special Centre for Molecular Medicine, JNU, New Delhi, PDF USA	1998
6	Anand Jain	PhD NIO Kochin, PDF School of Biotechnology, Dublin City University, Ireland	2003
7	Arshad Khan	UT Medical School at Houston, Texas	2003
8	Krishna Saharan	IIT Delhi- ETH Zurich, Basel Switzerland	2005
9	Rishiraj Chhipa	NCL Pune, PDRF, Division of Hematology/Oncology, Cincinnati Children's hospital Medical Center, Cincinnati, Ohio USA	
10	Sanjay Khandelwal	Bethesda, Maryland	
11	Sonia Panchhi (bt)	Ph. D. abroad after GRE & TOEFEL	2006
12	Pallavi Sharma	Ph.D. USA	
13	Satish Vedi	CDRI PhD, PDF University of Alberta, Edmonton, Canada	
14	Nidheesh Dadhich (BT)	PDF University of Alberta, JRF, Stem cells lab, MS University, Vadodara	2007
15	<i>Hemraj Chhipa</i>	RMIT University Melbourne Australia	
16	Bhupendra	Helsinki University PDF Earlier: Indian Institute of Science PhD, Bangalore	2002
17	Anil Dangi	CDRI PhD, University of Cincinnati PDF	
<b>Students in Research in National Laboratories</b>			
1	Sapna Jha	Deptt. of Microbiology, MS University of Baroda, Vadodara	1996
2	Apurva Khanna	IARI New Delhi	
3	<i>Manish Sharma</i>	Indian Toxicology Research Laboratory, Lucknow, IISc	1997
4	<i>Manohar Choudhary</i>	Bharat Biotech. Ltd., Hyderabad, NII	1998
5	<i>Rishi Raj Chhipa</i>	National Centre for Cell Science, Pune	1999
6	<i>Sanjay Khandelwal</i>	School of Life Sciences, JNU, New Delhi	2001
7	Devendra Choudhary	Deptt. of Microbiology, Pantnagar, CSIR Young Scientist Bhopal	2001
8	<i>Satish Vedi</i>	Central Drug Research Institute, Lucknow	2001
9	<i>Sarvesh Soni</i>	National Chemical Laboratory, Pune	2002
10	Sarita Bohra	Central Arid Zone Agricultural Research Institute, Jodhpur	2002
11	<i>Jitendra Mathuria</i>	Technical Assistant, BHU, Banaras	2002
12	<i>Arshad Khan</i>	National Chemical Laboratory, Pune	2003
13	<i>Anand Jain</i>	National Institute of Oceanography, Goa	2003
14	Narendra Nala	NDRI Karnal	
15	Neha Tanwar	M.Phil. (Microbiol) RGN Scholarship PhD NDRI Karnal	2007
16	Shipra Jaiswal (BT)	PhD at AFRI Jodhpur	2008
17	Parakram Singh Chauhan	PhD Panjab Univ Chandigarh, PDF IISER Mohali	2010
18	Pramod K. Jangir	JRF CSIR Institute of Genomics & Integrative Biology N. Delhi	2011
19	Preeti Verma	PhD Central University of Rajasthan, Ajmer	2011
20	Tanushree Dangi	King George Medical College, Lucknow	
21	Sonia Khanna	JRF DRDE Gwalior	
22	Prateek Sinha	SRF National Research Centre for Spice Seeds, Ajmer	
23	Vijay Veer Saharan	Research Scholar (Ph.D) at Central University of Rajasthan	
24	<i>Hemraj Chhipa</i>	JRF, ProMiC, DoM, MDSU Ajmer	2005
25	Monica Sharma	SRF, College of Dairy Sciences, Udaipur, M.Phil. Ajmer	2003
26	Teena Jain	Ph.D. Botany Deptt, MDSU Ajmer	2005
27	Devendra Kumar Goyal	PhD MLS University, Udaipur	
28	Anushree Gurjar	Ph.D. Botany Deptt, MDS Univ Ajmer	2005
29	Arpit Vijayvergiya	MBA, Bangalore	2005
30	Devki Nandan Purohit	PhD Bikaner	2005
31	Laxmi Narayan	BEEd	2005
32	Alpana Dave (BT)	PhD, Rajasthan University, Jaipur	2006
33	Pushpa Bairwa (BT)	BEEd	2006
34	Monica Vyas (BT)	PhD, Banasthali University, Banasthali	2006

35	Ritu Bala Verma (BT)	PhD, Banasthali University, Banasthali	2006
36	Deepak Kumar Bansal (BT)	M.Phil. MDS University, Ajmer,	2006
37	Anita Yadav	M.Phil. MDS University, Ajmer	2006
38	Karan Chaudhary (BT)	Joined BEd	2006
39	Rajesh Kumar Meena	Joined BEd	2006
40	Sudarshana Vaishnav	Joined BEd Merta City	2006
41	Ankita Gupta (BT)	M.Phil. BT MDS Univ Ajmer	2007
42	Anita Raj Bhati (BT)	M.Phil. DoM, MDS Univ Ajmer	2007
43	Nitika Chaudhary (BT)	Research Fellow, BISR, Jaipur	2007
44	Gajendra Singh (BT)	BEd	2007
45	Gajendra Kumar (BT)	BEd	2007
46	Anjali Chauhan (BT)	BEd	2007
47	Mohar Singh (BT)	BEd	2007
48	Nitika Sankhala	BEd	2007
49	Om Prakash	JRF, BISR, Jaipur, M.Phil. Microbiol Ajmer	2007
50	Jyotsna Gangwar	M.Phil. (Microbiology), Ajmer	2007
51	Kamaljeet Kaur	M.Phil. (Env Mgmt) Ajmer	2007
52	Neha Lal	M.Phil. (Env Mgmt) Ajmer	2007
53	Sampat Ram Meena	M.Phil. (Microbiol.) RGN Scholarship	2007
54	Devendra Kumar	PhD Zoology Department, MLS University Udaipur	2010
55	Deependra S. Shekhawat	Ph.D. MLS University Udaipur UGC BSR Meritorious Scholarship	2011
56	Gaurav Sharma	Ph.D. University of Rajasthan	2011
57	Sushil Kumar Barolia	PhD MLS University Udaipur	
<b>Other Jobs in Public Sector</b>			
1	Sangeeta Deedwania	School teacher	1995
2	Bindu Sharma	School teacher	1995
3	Jyoti sudha Parmar	School teacher	1996
4	Mukesh kumar Garg	Chief Medical & Health Officer's Office Barmer Earlier: SCMBAZR, Deptt. of Microbiology, MDS University Ajmer, Wockhardt,	1997
5	Neetu Khathuria	Lecturer, Govt. college, Ratlam	1998
6	NishiKant Agarwal	School teacher, KV, Sawai Madhopur	2000
7	Sunil Jaluthuria	High court Jaipur	2003
8	Rajesh Poonia	School teacher, Sikar	2004
9	Palaram Gujaria	PGT, Navodaya School	1999
10	Gajendra Singh Jewaria	Govt School teacher, Jaipur	2005
11	Abhinav Goyal	PG Teacher, Kendriya Vidyalaya No. 1 Jammu	2010
12	Sunil Jeph	Inspector Customs & Central Excise	2008
13	Chandradeep Jangir	Ministry of Communication and IT	
14	Poonam Yadav	Commercial Asstt, Rajasthan Vidut Vibhag	2010
15	Mrinal Mishra	Tech C, Microbial Culture Collection, NCCS, Pune	2009
16	Gaurav Sharma	Lab Technician, SMS Medical College Jaipur	2011
17	Rajesh Kumar	Lab Technician FIND project at STDC Ajmer	2013
18	Jitender Harchandani	District Consultant medical and health department ajmer	
19	Rajesh Kumar Meena (BT)	M.Phil. MDS University, Ajmer, RGNF for ST, N.E.Railway Boys Inter College, Gorakhpur	
20	Pinki Khalbadania	JLN Medical College, Ajmer	
21	Bhagchand Kumawat	Joined BEd Jammu, PATWARI in revenue board ajmer	2006
<b>Other Jobs in Private Sector</b>			
1	Vishnu Bansal	Akash Coaching Delhi	2002
2	Manisha Arora	Daswani Coaching, Kota	2001
3	Charu Gujral	Vision 2000, Kota	2003
4	Sarvesh Yadav	Botany Faculty, CLC coaching Sikar	2009

5	Anil Soni	Gurukripa Career Institute, Sikar	2010
6	Deependra S. Shekhawat	Biology Lecturer, Bansal Classes, Kota	2011
7	Jaspreet Singh	ProMiC, CSIR J/SRF, Deptt. of Microbiology, MDS University, Ajmer, Jaipur National University, Jaipur	2002
8	Anshu Maheshwari	St Stepens School, Ajmer	1996
9	Hema Rai	St Stephens School, Ajmer	1997
10	Seema Singhal	School teacher, Ajmer	1997
11	Mamta Sharma	Lab. Tech., Modi Institute, Kota	1998
12	Anoop Jassoria	Shri Mineral Waters, Ajmer	1998
13	Rajendra Panwar	Consultant Microbiologist, Bailey & G.F, Jyotiba Phule, Jaipur	1999
14	Ruchi Dwivedi	Coca-Cola, Udaipur	1999
15	Parul Sharma	Medical trascription, Jaipur	1999
16	Rajkumar Tinker	Coca-Cola, Delhi	2000
17	Sanjeev Arora	Bisleri International pvt.ltd. Jaipur	2000
18	Rohit	Mineral Waters, Kanpur	2001
19	Geetanjali Goswami	Microbiologist, Bisleri, Jaipur	2001
20	Banwari Lal	Microbiologist, McDonalds, Jaipur	2002
21	Gaurav Sharma	Lecturer, MGIMS, Jaipur	2003
22	Praveen Rathore	Bisleri, Jaipur, Jodhpur National University	2003
23	Amit Sharma	Lecturer, MN Institute of Applied Sciences, Bikaner	2003
24	Mahesh Saini	Lecturer, NK girls college, Jaipur	2004
25	Charu Sharma	Lecturer, IIS University, Jaipur	2004
26	Bharti Palasia	Microbiologist, Coca Cola, Kala Dera	2005
27	Nitu Tanwar	Microbiologist, Bisleri, Jaipur	2005
28	Kailash Meena	Lecturer, Bharatpur, PGT KV Viksapuri	2005
29	Vikram Kumar	Lecturer, MD College, Ganganagar	2005
30	Alpana Dave (BT)	Lecturer, MGIMS, Jaipur	2006
31	Neelima (BT)	MR, Ajmer	2006
32	Ravi Kumar Singh	Microbiologist, Panvta, HP	2006
33	Eti Kapoor	Lecturer, Ajmer Institute of Technology	2006
34	Kamlesh Jingar	QC, Mineral Water, Jaipur	2006
35	Sudarshana Vaishnav	Teaching, Ajmer	2006
36	Sarvasha (BT)	Lecturer, Sawai Madhopur	2006
37	Mahendra Kumar (BT)	Chemist, Bagru	2006
38	Ruchi	Microbiologist, Mineral Water, Jaipur	2006
39	Ritika Sharma	Lecturer, Aryabhata College, Ajmer	2007
40	Chitra Sharma	Teacher, Udaipur	2007
41	Anu Sharma	MJRP, Jaipur	2007
42	Asha Tejwani	Microbiologist, Saras Dairy, Ajmer	2008
43	Sunita Kala	School teacher, Kuchaman	2010
44	Alka Mittal	School Teacher, Sri Ganganagar	2010
45	Meenakshi Sharma	School Teacher, Kishangarh	2010
46	Vinod Kumar	Lecturer, GM College Bilara (Jodhpur)	2012
47	Arun Chaudhary	JJT University Sikar	
48	Om Prakash Chahar	JJT University, Sikar	
49	Himendu Bala	Teacher East Point School	
50	Om Shankar Nindriya	Gangrar Block, Chittorgarh	
51	Kamal Jeet Bains	lecturer in nursing college, Ajmer	
52	Sunil Yadav	Administrator, Global institute of nursing, Jaipur	
53	Neelam Sharma	Lecturer, Girls College Churu	
54	Vikas Tailor	Biology Teacher Bhilwara	
55	Devendra K Chaudhary	Lecturer, Modi University of Science & Technology, Laxmangarh	

## Appendix VII

## Innovation in Pedagogy

**Microsphere:** <https://microsphere.wooger.com/loginRegister.do#> A platform provided by Wooger to deliver presentations (powerpoint and video) to the students, obtain assignments, provide literature and extra teaching material to the students.

The screenshots illustrate the Microsphere platform's interface and content. Key elements include:

- Login Page:** A 'Welcome to Microsphere Knowledge Place' message and a sign-in form for user 'bhatnagarashis@gmail.com'.
- Dashboard:** A navigation menu with 'CONTENT', 'REPORTS', 'CAREER', and 'COMMUNICATION'. A 'Snapshot' section shows 'Active Modules (1)' at 100%.
- Module Management:** A page for managing the 'Fermentation technology' module, featuring a table of chapters with columns for Chapter Name, Type, Created Date, Threshold, Summary, Comment Status, and Action.
- Process Management:** A page for defining and measuring activities, with a table for 'My process' including columns for Process name, Coverage, and Owner.
- Modules Page:** A page for managing modules, with a table for 'My modules' including columns for Module Title, Owner, State, Chapters, and Actions.
- Presentation:** A slide titled 'HUMAN MICROFLORA' by Ashish Bhatnagar, with a summary: 'Resident flora of human body'.

## Appendix VIII

### Highlights of M.Sc. Microbiology course under CBCS scheme

Currently available in Microbiology and Environmental Science allowing interdisciplinary specializations.

Course is modular allowing exit after each semester:

- a. Minimum 1 semester for PG Certificate in Basic Microbiology
- b. Minimum 2 semesters for PG Diploma in Microbiology
- c. Minimum 3 semesters for Advanced PG Diploma in Microbiology
- d. Minimum 4 Semesters for M.Sc. in Microbiology

In addition a student may earn Certificate of Specialization or PG Certificate under following conditions:

#### **Certificate of specialization or skills learnt**

##### **Specialization in Biochemistry and Physiology of Microorganisms**

All of the following courses MIC 403. Biochemistry (4L), MIC 421 Sk. Biochemistry & Molecular Biology (2P), MIC 407 Microbial Physiology & Development (4L), MIC 411 Sk Physiology and Ecology (3P)

##### **Specialization in Microbiology of Extremes**

All of the following courses MIC 402. Diversity of Prokaryotes (3L), MIC 403. Biochemistry (4L), MIC 407 Microbial Physiology & Development (4L), MIC 422. Diversity of Eukaryotic Microorganisms (4L), MIC 409 Microbial Ecology & Biology of Extremes (4L) and MIC 411 Sk Physiology and Ecology (3P) or MIC 421 Sk. Biochemistry & Molecular Biology (2P)

##### **Specialization in Microorganisms Diversity and Ecology**

Courses including MIC 402. Diversity of Prokaryotes (3L) and MIC 409 Microbial Ecology & Biology of Extremes (4L) with minimum 9 credits from the following:

MIC 422. Diversity of Eukaryotic Microorganisms (4L), MIC 424 Sk. Virology (2L), MIC 432 Sk Geomicrobiology & Agricultural Microbiology (4L + 2P), MIC 411 Sk Physiology and Ecology (3P)

##### **Specialization in Molecular Biology**

Minimum 9 credits from the following: MIC 421 Sk. Biochemistry & Molecular Biology (2P), MIC 425 Immunology (4L), MIC 434 Sk Bioinformatics (4L), MIC 415 Sk Applied Microbiology & Molecular Biology (3P)

##### **Specialization in Environmental Microbiology & Biotechnology**

Courses including MIC 430 Sk Microbiology of Wastes and Waste Remediation (3L) with minimum 9 credits from the following courses:

MIC 433 Energy and Alternative Energy (1L), MIC 432 Sk Geomicrobiology & Agricultural Microbiology (4L + 2P), MIC 426 Sk Bioprocess Engineering (4L + 2P), MIC 427 Sk Biofuel & Bioenergy (3L+2P), MIC 435 Biostatistics & Computational Biology (4L)

##### **Specialization in Industrial Microbiology & Biotechnology**

MIC 426 Sk Bioprocess Engineering (4L + 2P) and minimum 5 credits of the following: MIC 431 Sk Industrial Microbiology (4L), MIC 429 Sk Enzymology (Pre-requisite: MIC 403) (3L), MIC 435 Biostatistics & Computational Biology (4L), MIC 427 Sk Biofuel & Bioenergy (3L+2P), MIC 428 Sk Food Microbiology (3L + 2P), MIC 430 Sk Microbiology of wastes and Waste Remediation (3L)

##### **Specialization in Biofuel & Bioenergy**

Courses including MIC 433 Energy and Alternative Energy (1L), MIC 427 Sk Biofuel & Bioenergy (3L+2P) with minimum one of the following: MIC 426 Sk Bioprocess Engineering (4L + 2P), MIC 435 Biostatistics & Computational Biology (4L)

##### **Specialization in Medical Microbiology**

MIC 423 Medical Microbiology (4L), MIC 424 Sk. Virology (2L), MIC 425 Immunology (4L), MIC 435 Biostatistics & Computational Biology (4L) + courses with PG diploma

## Appendix IX

### Papers presented in the conferences/seminars/symposia/workshops

S. No.	Title of the Paper presented	Conference/ Seminar	Organized by
1	Monica Bhatnagar, Sanjay Pareek, Jhuma Ganguli, Ashish Bhatnagar. Chemical and rheological characterization of a bioactive extracellular polysaccharide from <i>Nostoc calcicola</i> .	National Conference on Traditional Conservation of Plant Biodiversity and Energy resources vis a vis Biotechnological tools for sustainability, 25-26.12.2010	Society for Plant Research, CCS University, Meerut
2	Monica Bhatnagar, Sanjay Pareek, Jhuma Ganguli, Ashish Bhatnagar. Rheology, composition and potential of an exopolymer from a desert borne cyanobacterium <i>Anabaena variabilis</i> .	International Conference on Microorganisms in Environmental Management and Biotechnology, July 1-3, 2011.	Barkatullah University, Bhopal
3	Ashish Bhatnagar & Monica Bhatnagar. Strategies to reduce cost of production of algae fuels		
4	Monica Bhatnagar. Chemotaxonomy and Molecular Taxonomy tools		
5	Monica Bhatnagar 16S rDNA separation and amplification through PCR	Workshop on the Diversity of Desert Bacteria (12-13.3.2012)	Prosthecate Bacteria & Micrococcus Centre, Microbiology Deptt, MDS University Ajmer
6	Monica Bhatnagar Protein profiling		
7	Monica Bhatnagar Moringa oleifera biopolymers: A novel source of wound dressings	International conference on Biotechnology: A Rendezvous with basic Sciences (26-27.12.2012)	NAAS Complex, New Delhi
8	Monica Bhatnagar, S. Pareek, J. Ganguli, A Bhatnagar. Rheology, composition and potential of an exopolymer from a desert borne cyanobacterium <i>Anabaena variabilis</i>	International Conference on Microorganisms in Environmental Management and Biotechnology, July 1-3, 2011.	Barkatullah University, Bhopal
9	Monica Bhatnagar, Laxmi Parwani, A Bhatnagar. Cyanobacterial exopolymers: The next gen wound management materials	International Conference on Algal Biorefinery (ICAB 2013) 11-12.1.2013	IIT Kharagpur
10	Monica Bhatnagar. Defluoridation potential of fungal biosorbents	National seminar on water and sewage management 5-7 March 2013	Department of Environmental Science, MDS University Ajmer
11	Monica Bhatnagar. Green polymers in a biorefinery approach	Workshop on algae cultivation and biofuel production 26-31.7.2013	UGC ASC and Algae Biofuel & Biomolecules Centre, MDS University, Ajmer

## Appendix X

### Introductory note on the Department of Microbiology

The objectives and activities of the Department may be depicted through an insignia as shown below



- It has three components revealing basic morphological diversity of the microorganisms: spheres, rods and filaments/spirals
- Lower most form also depicts M that is the first letter of Microbiology
- It also simulates  $\mu$  which is the size range of microorganisms in micrometer, i.e.  $\mu\text{m}$
- Deliberately the structure has been made with imperfect strokes, Thus appears wavy in order to depict secretions out of the cells in the form of polymers that occur in most of the desert inhabiting microorganisms to help them survive in the dry arid environment near which the Maharshi Dayanand Saraswati University (department) is situated. Thus the insignia also depicts the core microbial group and specialization of the faculty.
- Similarly the sphere above also depicts the sun again specifying heat of the tropical sun of the region where the University is situated.
- Lastly, the structure in entirety shows a human like form with head above and hands falling down in humility to depict that the ultimate purpose to study microorganisms is to know how not only man but the entire life on earth is indebted to the microbes; what microbes do for man and the maintenance of life on the earth. The man hands down also shows his respect towards these invisible creatures.

विशुद्ध  
एवं  
अनुप्रयुक्त  
रसायन विज्ञान  
विभाग  
DEPARTMENT  
OF  
PURE  
&  
APPLIED  
CHEMISTRY\*

\*The original Evaluative Report sent by the Department of Pure & Applied Chemistry has been appended in view of the letter no. DPAC/2015-16/493 dtd 5.4.2016 of the Head of the Department sent in response to seeking verification of re-formatted report wherein it is

specifically mentioned that "Since you (the NAAC-SSR Preparation Committee) have changed the font etc. you own the responsibility of its correctness with the original lying with you and it has to be signed by you only".

## Evaluative Report of the Department for last five years

1. Name of the Department    **Department of Pure and Applied Chemistry**
2. Year of establishment :    **19<sup>th</sup> April 1994**
3. Is the Department part of a School/Faculty of the university?    Department under **Faculty of Science**
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt., etc.)  
**Post Graduate Programmes -**  
 (i)    **M.Sc. Applied Chemistry &**  
 (ii)    **M.Sc. Chemistry**  
**Doctoral Programme -    Doctor of Philosophy (Ph.D.)**
5. Interdisciplinary programmes and departments involved - **NIL**
6. Courses in collaboration with other universities, industries, foreign institutions, etc. - **NIL**
7. Details of programmes discontinued, if any, with reasons - **No programme was discontinued after undersigned became Head of Department in November 2009.**
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System  
**(1) M.Sc. Chemistry - Semester Scheme from 2015-16;**  
**(2) M.Sc. Applied Chemistry - Semester Scheme**
9. Participation of the department in the courses offered by other departments - **N.A.**
10. Number of teaching posts sanctioned, filled and actual (Professors/ Associate Professors/ Asst. Professors/ others)  
**Sanctioned and Filled - Information to be obtained from Establishment**

### Section.

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	Estt. To provide	ONE	CAS
Associate Professors	-do-	NIL    NIL	
Asst. Professors	-do-	NIL	NIL
Others	-do-	NIL	NIL

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 Years
Dr.R.Mehra	M.Sc. Chemistry (Gold Medalist) Ph.D.	Professor	Physical Chemistry Research: Physical and Analytical Chemistry	28 years	05 students awarded Ph.D. 02 students admitted in 2015

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors  
**(Guest Faculty from outside the State and from State of Rajasthan)**

Prof. J.D.Pandey, Allahabad  
 Prof.K.S.Gupta, Jaipur  
 Prof.K.K.Mishra,Jabalpur  
 Prof.Amendru Pal, Kurukshetra  
 Prof. D.I.Brhambatt,Gujarat  
 Prof. C.P.Bhasin, Gujarat  
 Prof.KH.Chikaliya,Gujarat  
 Prof. RR. Jha, Ranchi  
 Prof. R.K.Bansal, Jaipur  
 Prof. A.P.Mishra, Sagar  
 Dr.Brij Bihari Malav, Sikar  
 Dr.Rajeev Agarwal, Bhilwara  
 Dr.Amit Singh Thakur,Indore  
 Dr.Shilpi Vats, Gurgaon

13. Percentage of classes taken by temporary faculty - programme-wise information  
 M.Sc.Chemistry - **Vary each year depending on availability of Guest Faculty on lecture basis**  
 M.Sc.Applied Chemistry - Workload left after assigning maximum workload to one permanent teacher as per norms **vary each year and is covered by guest faculty depending on availability of Guest Faculty from Ajmer and outside on lecture basis. In addition, the permanent teacher also engages vacant periods to ensure six hour teaching everyday.**
14. Programme-wise Student Teacher Ratio :

**In general 40:1 in both the programmes.The ratio increases with increase in number of seats, if any.**

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual -

**Establishment Section to provide exact information.**

**Actual -One Lab Assistant,One Assistant, Three ClassIV**

16. Research thrust areas as recognized by major funding agencies – Biomonitoring of metals, Physical Acoustics and Bioacoustics.
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. –

Two Projects under WOS Scheme with requests totalling around for Rs.40/- lacs submitted by girl applicants with Dr.R.Mehra , then Associate Professor as Mentor were not forwarded by the university to DST for sanction of grant in April 2014.

18. Inter-institutional collaborative projects and associated grants received –N.A.

a) National collaboration-NIL      b) International collaboration-NIL

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:

**NIL The overburdened teaching and administrative work load coupled with non-forwarding of students projects in April 2014 the only teacher feels discouraged.**

20. Research facility / centre with

- state recognition
- national recognition
- international recognition -  $\sqrt{\sqrt{\quad}}$

- (I) As is reflected by the invitations received by Dr. Rita Mehra to present her work to the international community at several places as given in Point No.25 below:

**(II) DR. MEHRA IS REFEREE FOR FOLLOWING NATIONAL AND INTERNATIONAL JOURNALS:**

1. Chemical Engineering Communications , UK
  2. Clinical Chemistry and Laboratory Medicine
  3. Environmental Pharmacology and Toxicology, The Netherlands
  4. Journal of Physical Chemistry
  5. Journal of Chemical Engineering Data
  6. Arabian Journal of Chemistry
  7. Biological Trace Element Research
  8. Journal of Clinical and Medicine Research
  9. Journal of Clinical Pathology and Forensic Medicine
  10. African Journal of Pure and Applied Chemistry
  11. Journal of Physical Education and Sports Management
  12. Journal of Geography and Regional Planning
  13. Indian Journal of Biochemistry & Biophysics
  14. Indian Journal of Chemistry
  15. Journal of Indian Chemical Society
  16. Journal of Pure and Applied Ultrasonics
  17. Chemical and Environmental Research
  18. Journal of Chemical Biological and Physical Sciences
  19. African Journal of Plant Science
  20. Journal of Environmental Science and Water Resources
  21. Indian Journal of Physics
  22. BioNano Science
  23. Journal of Forensic Research
  24. American Chemical Science Journal
  25. Herald Journal of Environmental and Health Sciences
  26. Royal Society of Chemistry Advances, Cambridge, U.K.
21. Special research laboratories sponsored by / created by industry or corporate bodies - NIL
22. Publications:
- \*Number of papers published by Dr. Rita Mehra (the only teacher in the Dept.) in peer reviewed journals (national / international) - **Twenty four in last five years, I.F.- Variable ; Overall Good, More than hundred research papers in all**
  - \* Monographs
  - \* Chapters in

Books\*Edited Books-

NIL

\* Books with ISBN with details of publishers -

\*Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\*Citation Index - range / average

\*SNIP

\* SJR

\*Impact Factor - range / average

\*h-index

23. Details of patents and income generated - N.A.
24. Areas of consultancy and income generated -N.A.
25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad -

**Dr.R.Mehra Invited to deliver talks in International Conferences on basis of her research work as given below :**

- (i) "International Forum of Analytical Science" in Bangkok (Thailand) from 17<sup>th</sup> to 18<sup>th</sup> January 2012.
- (ii) "Third Annual International Renewable Energy Conference on Climate Change" in United Kingdom from 16<sup>th</sup> to 20<sup>th</sup> September 2011.
- (iii) International Conferences on 2011 Turkey International Experimentally Anesthesiology Forum in Tekirdag (Turkey) from 9<sup>th</sup> to 11<sup>th</sup> September 2011
- (iv) "International Conference on Global Challenge's- The Role of Chemistry in Giving Their Solutions" in Bangkok (Thailand) from 11<sup>th</sup> to 15<sup>th</sup> June 2011.
- (v) "EPS Global Pain Conference" in Jaingyin (China) from 26<sup>th</sup> to 27<sup>th</sup> November 2010.
- (vi) "EPS Global International Congress of Internal Medicine" in Lanzhou (China) from 12<sup>th</sup> to 13<sup>th</sup> November 2010.

26. Faculty serving in

- a) National committees b) International committees c) Editorial Boards

Dr. R.Mehra, Professor and Head DPAC, has served on KEY POSITIONS ON EDITORIAL BOARDS as follows:

- **MEMBER ADVISORY BOARD , JOURNAL OF CHEMISTRY IN ASIA**
- **MEMBER, EDITORIAL BOARD , JOURNAL OF NATURAL SCIENCES**
- **EDITOR JOURNAL OF CHEMICAL BIOLOGICAL AND PHYSICAL SCIENCES**
- **ASSOCIATE EDITOR JOURNAL OF INDIAN CHEMICAL SOCIETY (2006-2007)**

d) any other (please specify)

Dr. R.Mehra, Professor and Head, DPAC has been/is :

(i) Member, Advisory Committee, 62<sup>nd</sup> National Conference of Indian Commerce Association in 2009.

(ii) Member, Advisory & Welcome Committee, National Conference on “Impact of Climate Change with Special Emphasis on Desertification” 2011

(iii) Member, Advisory Committee, Second International Youth Festival ‘Bani Thani 2011’.

(iv) Member, Advisory Committee, Akhil Bhartiya Ved and Sanskrit Upanishad “Vasantotsav” 2011

(v) Member, Welcome Committee, NAAC Team for Accreditation of ASC from 7<sup>th</sup> to 9<sup>th</sup> May 2012.

(vi) Coordinator, National Conference on Geomatics for Natural Resources and Climate Change with special reference to Rain-Fed Agriculture and Water Resources on 8<sup>th</sup> to 9<sup>th</sup> October 2015

(vii) Member, National Advisory Committee , National Seminar on Recent Trends in Chemical Sciences- Global Opportunities and Challenges on 18<sup>th</sup> to 19<sup>th</sup> January 2016

- (viii) Member, National Advisory Committee , National Seminar on Emerging Trends in Smart Chemical Materials-Opportunities and Challenges in January 2016

**Others: Dr.Mehra has been :**

1. Ph. D. Thesis Examiner of State & Central Universities viz. Gujarat University, Ahmedabad, Osmania University Hyderabad, Bharathidasan University, Tiruchrippalli, University of Madras, Chennai, Gurukul Kangri University, Haridwar, Dr. B.R. Ambedkar University Agra, VBS Poorvanchal University Jaunpur(U.P.), Naronmanian Sundaranar University, Tirunelveli , Tamil Nadu, Maduraj Kamaraj University ,Madurai etc. during last five years.
2. Judge of Poster Paper Presentation in 46<sup>th</sup> Annual Convention of Chemists held at National Institute of Technical Teachers' Training and Research (NTTRI), Bhopal from 12<sup>th</sup> to 15<sup>th</sup> December 2012.
3. Paper-Setter /Examiner in Ph.D. Course Work in 2012 and 2013 in other university
4. Member, Academic Council , MDS University Ajmer
5. Convener, Board of Studies in Chemistry, MDS University Ajmer
6. Convener, Committee of Courses in Applied Chemistry, MDS University Ajmer
7. Convener, Committee of Courses in Textile Chemistry, MDS Unievrstity Ajmer
8. Fellow of Indian Chemical Society
9. Fellow of Institution of Chemists
- 10.Fellow of Indian Council of Chemists
- 11.Life Member, Indian Science Congress Association
- 12.Life Member, Ultrasonic Society of India
- 13.Life Member, Acoustical Society of India

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

**DR.RITA MEHRA AS COURSE COORIDNATOR ORGANISED THE FOLLOWING ORIENTATION COURSES, REFRESHER COURSES, SPECIAL SUMMER SCHOOL, SPECIAL WINTER SCHOOL, WORKSHOPS ETC. :**

- (i) Course Coordinator, Refresher Course in Chemistry Education and Applied Chemistry, UGC-ASC, MDS University Ajmer, 2012-13
- (ii) Coordinator, Orientation Programme 2011, UGC-ASC, MDS University Ajmer
- (iii) Coordinator, Refresher Course in Political Science 2011 UGC-ASC MDS University Ajmer as Director ASC.
- (iv) Coordinator, Orientation Programme 2010, UGC-ASC, MDS University Ajmer
- (v) Coordinator, Workshop on "How to Write a Ph.D. Thesis" 2010, UGC-ASC, MDS University Ajmer
- (vi) Workshop on "Interdisciplinary Teaching and Research", at MDS University Ajmer in March 2010.
- (vii) Coordinator, Orientation Programme 2009, UGC-ASC, MDS University Ajmer
- (viii) Coordinator, Workshop on Interactive Programme in Research-2009 (IPR-2009) UGC-ASC, MDS University Ajmer
- (ix) Coordinator, Special Winter School 2008-09, UGC-ASC, MDS University Ajmer
- (x) Coordinator, Special Summer School-2008, UGC-ASC, MDS University Ajmer, 2008-09
- (xi) Director, Academic Staff College, MDS University Ajmer from July 2008 to April 2011
- (xii) Course Coordinator, M.Sc. Chem. SFS Course, Department of Pure & Applied Chemistry, MDS University Ajmer

**DR. RITA MEHRA ACTED AS CHAIRPERSON / CO-CHAIRPERSON IN FOLLOWING INTERNATIONAL AND NATIONAL CONFERENCES:**

- (I) Chaired a technical session in International Conference on Innovative trends in Engineering , Science and Management -2015 (ITESM-2015) organized at Patel Group of Institutions (ISO9001-2000 & 'A' Grade Certified) at Indore from 13<sup>th</sup> to 14<sup>th</sup> March 2015.
- (II) Chaired a technical session in National Conference on Emerging Trends in Engineering and Chemical Sciences (ETES-2013) organized at Gurukul Kangri University Haridwar from 9<sup>th</sup> to 10<sup>th</sup> November 2013.
- (iii) Chaired a technical session in International Conference on New Emerging Trends in Chemistry – A Satellite conference of 3<sup>rd</sup> Indo-German Conference on Modelling Chemical and Biological (Re) activity organized at the IIS University, Jaipur from 3<sup>rd</sup> to 4<sup>th</sup> March 2013.
- (iv) Chaired a Technical Session in 49<sup>th</sup> Annual Convention of Chemists organized at National Institute of Technical Teachers' Training and Research, Bhopal in from 12<sup>th</sup> to 15<sup>th</sup> December 2012
- (v) Chaired a Technical Session in "National Conference on Progress in Electronics and Allied Sciences (PEAS-2012)" organized at Gurukul Kangri University Haridwar from 3<sup>rd</sup> to 4<sup>th</sup> November 2012
- (vi) Chaired a Technical Session in "International Conference on Green Technologies for Environmental Rehabilitation (GTER-2012)" organized at Gurukul Kangri University Haridwar from 11<sup>th</sup> to 13<sup>th</sup> February 2012
- (vii) Chaired a Poster Session in "International Conference on Green Technologies for Environmental Rehabilitation (GTER-2012)" organized at Gurukul Kangri University Haridwar from 11<sup>th</sup> to 13<sup>th</sup> February 2012
- (viii) Chaired a session in National Conference on "Emerging Views in Advanced Chemistry (EVIAC-2010)" organized at M.L.V. Government College, organized at Bhilwara from 17<sup>th</sup> -19<sup>th</sup> December 2010

**INVITED LECTURES DELIVERED/TO BE DELIVERED IN FOLLOWING INTERNATIONAL AND NATIONAL CONFERENCES /SEMINARS BY DR. RITA MEHRA**

1. Invited Lecture in 103<sup>rd</sup> Indian Science Congress in Chemical Science Section at University of Mysore in January 2016
2. Invited Lecture in UGC Sponsored National Seminar on Recent Trends in Chemical Sciences: Global Opportunities ND Challenges at S.G.G. Government College Banswara (Rajasthan) in January 2016.
3. Invited Lecture in National Seminar on Emerging Trends in Smart Chemical materials: Opportunities and Challenges at Samrat Ashok Technological Institute , Vidisha (M.P.) in January 2016.
4. Invited Lecture in International Conference on Innovative trends in Engineering , Science and Management -2015 (ITESM-2015) at Patel Group of Institutions (ISO9001-2000 & 'A' Grade Certified) Indore in March 2015.
5. Invited Lecture in 101<sup>st</sup> Indian Science Congress in Chemical Science Section at University of Jammu, Jammu in February 2014
6. Invited Lecture in National Conference on Emerging Trends in Engineering and Sciences (ETES-2013) at Gurukul Kangri University Haridwar in November 2013
7. Invited lecture in 49th Annual Convention of Chemists at National Institute of Technical Teachers' Training and Research, Bhopal in December 2012
8. Invited lecture in National Conference on Progress in Electronics and Allied Sciences (PEAS-2012) at Gurukul Kangri University, Haridwar in November 2012.
9. Invited lecture in National Conference on Soil, Air and Water Resource Management at Govt. Girls Autonomus P.G. College of Excellence, Sagar (M.P.) in March 2012

10. Invited lecture in International Conference on Progress in Green Technologies For Environmental Rehabilitation (GTER-2012) at Gurukul Kangri University, Haridwar (Uttarakhand) in February 2012.
11. Invited lecture in National Conference on “Emerging Views in Advanced Chemistry”, Department of Chemistry, M.L.V. Government College, Bhilwara, in December 2010.

**INVITED LECTURES DELIVERED BY DR. RITA MEHRA IN FOLLOWING NATIONAL WORKSHOPS, SEMINARS, ORIENTATION PROGRAMMES, WINTER SCHOOLS, SUMMER SCHOOLS, REFRESHER COURSES ETC. :**

1. Invited Lecture in Short Term Course on Science and Technology to Save the Environment at Government Engineering College Ajmer under TEQIP-II in November 2015.
2. Resource Person in Workshop for Development of design and prototype low cost experiments under the programme entitled “Development of Green Chemistry in the Institute” at Regional Institute of Education, Ajmer in June 2014
3. Invited Lectures in Refresher Course in Chemical Science and Technology, SP Patel University, Vallabh Vidyanagar, Anand (Gujarat) in May 2014.
4. Invited Lectures in Refresher Course in ‘Chemistry Education and Applied Chemistry” MDS University Ajmer in October 2012.
5. Invited lecture in Orientation Programme MDS University Ajmer in January 2011.
6. Invited lecture in Orientation Programme MDS University Ajmer in October 2010.
7. Invited lecture in Workshop on “How to Write a Ph.D. Thesis”, MDS University Ajmer in March 2010.

8. Invited lecture in Orientation Programme, MDS University Ajmer in June 2009.
9. Invited lecture in Interactive Programme on Research (IPR-09), MDS University Ajmer in March 2009.
10. Invited lecture in Special Winter School (SWS-2009), MDS University Ajmer in January 2009.

**PARTICIPATION OF DR. R. MEHRA IN OTHER ACADEMIC PROGRAMMES:**

1. Workshop on Global Positioning System & Bhuvan (Gateway to Indian Earth Observation ) on 25<sup>th</sup> March 2013 at Department of Remote Sensing and Geoinformatics, MDS University Ajmer
2. Seminar on Old People and their Rights on 9<sup>th</sup> December 2014 ,MDS University Ajmer
3. Seminar on Women Rights on Human Rights Day on 10<sup>th</sup> December 2013 ,MDS University Ajmer
4. UGC Sponsored Principal's Meet on Anti Ragging Measures, MDS University, Ajmer, July 2009.

**INVITED FOR LECTURE IN NATIONAL SYMPOSIUM, REFRESHER COURSE ETC. BUT COULD NOT MAKE IT:**

1. Invited to deliver lecture in Eighteenth National Symposium on Ultrasonics (NSU-XVIII) at Vellore Institute of Technology, Vellore, Tamilnadu from 21-23 December 2009.
2. Invited lecture in Refresher Course in Chemistry in Amravati University, Maharashtra in September 2010.
3. Invited to deliver lecture / Chair a Session in the National Conference on Science and Technology for Indigenous Development in India organised by Haridwar Chapter of the Indian Science Congress Association and Faculty of Engineering and Technology , Gurukul Kangri Vishvidyalaya Haridwar from 28<sup>th</sup> to 30<sup>th</sup> September 2015.

## 28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects  
100% students of M.Sc.Sem.I, II, III and IV Applied Chemistry submit Project Report in every paper as a part of Internal Assessment .
- percentage of students doing projects in collaboration with other universities / industry / institute - **One student, Amit Singh Thakur, completed DST Project, State of Rajasthan with Dr.R.Mehra as Guide/Mentor**

## 29. Awards / recognitions received at the national and international level by

- Faculty -(1)Dr. Mehra was awarded Certificate of American Chemical Society for valuable contribution and dedicated service in the peer review of manuscripts submitted to ACS journals;

(2) Biography of Dr.Mehra appear in International Directories.

(3) Dr.Mehra was Honoured as “Chartered Chemist” by Institute of Chemists on account of meritorious research

- Doctoral / post-doctoral fellows : NA
- Students -**There is no mechanism in the university to procure this information from passed out students.**

## 30. Seminars/ Conferences/Workshops organized and the source of funding (national / International) with details of outstanding participants, if any.

- 1. Department Organised UGC Sponsored National Seminar on 2DNMR Spectroscopy in March 2013 for College and University Lecturers, Chemists working in Industries and UGC Qualification holders (NET, SET etc.) for Lecturership.**
- 2. Department Organised UGC Sponsored National Seminar on 13 CNMR Spectroscopy in March 2015 for College and University Lecturers, Chemists working in Industries and UGC Qualification holders (NET, SET etc.) for Lecturership.**

**3. Department Organised UGC Sponsored National Seminar on Mass Spectroscopy in October 2015 for College and University Lecturers, Chemists working in Industries and UGC Qualification holders (NET, SET etc.) for Lecturership.**

31. Code of ethics for research followed by the departments: Taken care Of.

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Chemistry	Normally every year 150-200	As per merit		Vary every year	Vary every year
M.Sc. Applied Chemistry	Normally every year 100-150	-do-		-do-	-do-

33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc. Chemistry	Good number from MDS University Ajmer.	Majority from University of Rajasthan Jaipur. Some from JNV University Jodhpur and MLS University Udaipur	Sometimes from Outside Rajasthan	NIL
M.Sc. Applied Chemistry	-do-	-do-	-do-	NIL

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

**There is no prescribed mechanism to obtain such information from passed students but many have cleared these exams . However, as per verbal information of ex-students who as and when come to the Department following students have cleared the exams:**

**Jagdeesh Meena – M.Sc.Chemistry-2009- NET (JRF)**

**Poonam Kumari, M.Sc. Chemistry, 2009, NET**

**Anita , M.Sc.Chemistry, 2009, NET**

**Abhishek Tilkar- M.Sc.Applied Chemistry- 2010- NET, GATE**

**Pappu Ram Jeetarwal- M.Sc.Chem-2010- SET**

**Akhilesh Rawat –M.Sc.Applied Chemistry- 2010- NET**

**Pappu Lal Mali, M.Sc.Chemistry, 2011, NET**

**Rajeev Maurya, M.Sc.Chemistry- 2011-NET**

**Monika Rathore ,M.Sc. Chemistry, 2010, NET**

**Sanwarmal Jat- M.Sc. Chemistry, 2010 – NET (JRF), SLET**

**Priyanka Kumari Badala - M.Sc. Chemistry, 2010, SET**

**Surgyan Chand Yadav, M.Sc. Chemistry, 2010, SET**

**Bharat Kumar Purushwani, M.Sc.Chemistry, 2012, NET&GATE**

**Mukesh Sharma, M.Sc. Applied Chemistry, 2010, NET(JRF)**

**Sudhir KumarShoora, M.Sc. Applied Chemistry, 2009 NET(JRF), GATE**

**Ranveer Singh, M.Sc. Applied Chemistry, 2009, NET**

**Arvind Kumar Meena, M.Sc. Chemistry, NET**

**Madhu Toshniwal, M.Sc. Applied Chemistry, SLET**

**Rajni Sharma, M.Sc.Chemistry, NET**

**Shivraj Singh Chaudhary –M.Sc. Chemistry - NET (JRF), GATE**

**Rajeev Agarwal – M.Sc. Applied Chemistry- NET, SLET, GATE**

**Rajendra Kumar Singla- M.Sc. Chemistry- NET (JRF), GATE**

**Sumita-M.Sc. Chemistry, SLET**

**Poonam Choudhary,M.Sc. Applied Chemistry, NET**

## Tikam Chand Sharma, M.Sc. Applied Chemistry, NET

35. Student progression :

Student progression	Percentage against enrolled
UG to PG	N.A.
PG to M.Phil.	N.A.
PG to Ph.D.	There is no established mechanism But students opt for Ph.D. subject to clearing RET Examination and as per the vacant seats available with Supervisors
Ph.D. to Post-Doctoral	Not known
Employed <input type="checkbox"/> Campus selection  <input type="checkbox"/> Other than campus recruitment	N.A. <b>No prescribed mechanism exist to obtain this information but students are recruited in industries, laboratories after PG as per verbal information</b>
Entrepreneurs	No information provided

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university-NIL	
from other universities within State -100	
from universities from other States-NIL	
from universities outside the country NIL	

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period NIL

38. Present details of departmental infrastructural facilities with regard to

a) Library - Seventy three (73) books in the Department Library but neither staff nor library room is available **Students are also permitted to use the personal books of Dr.R.Mehra , Professor and Head of Department kept in the Department.**

b) Internet facilities for staff and students NO

c) Total number of class rooms **Two**

- d) Class rooms with ICT facility - Insignificant
- e) Students' laboratories - **Four**
- f) Research laboratories **One**
39. List of doctoral, post-doctoral students and Research Associates
- a) from the host institution/university **Ph.D. Research registration in Chemistry not held from 2010 to May 2014. Two students admitted for Ph.D. Degree after Research Eligibility Test (RET) for admission to Ph.D. was held in 2015 by the University.**
- b) from other institutions/universities **-Information Not available in the department, however as per verbal information few students have done and are doing Ph.D. from IITs and from University of Rajasthan, Jaipur after clearing the Eligibility Test for the purpose.**
40. Number of post graduate students getting financial assistance from the university. **NIL**
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. **No new programmes started**
42. Does the department obtain feedback from
- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?  
**Yes , suggestions of visiting faculty and guest faculty are incorporated in syllabi in respective Board Of Studies' and Committee of Courses' meetings**
- b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?  
**The visiting faculty invited for expert lectures are invited every year for lectures on request of studentssubject to their availability.**
- c. alumni and employers on the programmes offered and how does the department utilize the feedback?  
**No formal method but the students absorbed by industries and Colleges in itself is a feedback of the courses**
43. List the distinguished alumni of the department (maximum 10)
- (i) Devesh Mahla - Indian Police Service
- (ii) Dr.Mithlesh - Officer (Lab) Indian Oil Corporation, Ahmedabad

- (iii) Dr.Ashish Gupta- Senior Scientific Officer, Ranbaxy Ltd. (Gurgaon)
- (iv) Dr.Kamod Singh Meena- Lecturer, MLV Government College Bhilwara(Raj.)0
- (v) Arvind Kumar Meena, Lecturer, Government College Tonk (Raj.)
- (vi) Jagdeesh Meena , Lecturer ,Government College Karauli (Rajasthan
- (vii) Chhagan lal , Quality Inspector, Food Corporation of India, Chandigarh (Punjab)
- (viii) Amit Mundra, Senior Chemist, Chambal Fertilizers&Chemicals , Kota (Rajasthan.)
- (ix) Dr.Amit Singh Thakur, Assistant Professor, Patel College of Science and Technology, Indore (M.P.)
- (x) Dr.Brij Bihari Malav, Assistant Professor, Pratap Institute of Technology,Palsana, Sikar (Rajasthan)
- (xi) Arun Jain and Nirmal Choudhary, Metallurgical Chemist, Indian Railways.
- (xii) Pappu Lal Mali, Junior Chemist , RSEB
- (xiii) Poonam Kumari-- State Pollution Control Board-Jaipur(Rajasthan)
- (xiv) Rajeev Agarwal, Assistant Professor,Malviya Textile Engineering Institute, Bhilwara (Rajasthan)
- (xv) Pooja Sharma , Lecturer (Senior Grade)in Chemistry, Government Engineering College Ajmer(Rajasthan)
- (xvi) Madhu Toshniwal ,Lecturer, Government Women Engineering College Ajmer(Rajasthan)

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

**Special lectures of external experts and peers in various fields are organized every year as per the provision of the university. Students are also allowed to participate in the National Seminars organized by the Department and get benefitted by the Lectures of the subject experts.**

45. List the teaching methods adopted by the faculty for different programmes.

**Lecture Method, Demonstration Method, Power Point presentations**

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

As per the procedure laid down by the university

47. Highlight the participation of students and faculty in extension activities.

As per the university organization of such activities.

48. Give details of “beyond syllabus scholarly activities” of the department.
- 1. Organised Co-curricular activity entitled” The Minds who taught us how to know and alter things (A Glimpse of Noblemen and their Novelty in Chemistry) on 25<sup>th</sup> October 2010**
  - 2. Organised Exhibition ‘Chemism’ of Working Models on applications of Chemistry and Applied Chemistry on 30.9.14**
  - 3. Organised Co-Curricular activity – Chemistry of Divinity on 13.10.14**
  - 4. Cultural Activity “Chemic” organised on 1.5.2015**
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. -  
**Department has not been informed of any provision other than NAAC in vogue in the university for gradation.**
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied. -  
The only teacher in the Department during last five years has contributed 24 research papers, chaired sessions in national and International Conferences, was invited and delivered Invited Lectures in national and International Conferences and Forums in Basic and Applied Chemistry both. Thus the Department has generated new knowledge in Basic and Applied Subject and won National and International recognition. It was a privilege and proof of recognition that Dr.R.Mehra was invited to deliver Invited Lecture in **Chemical Science Section in 101<sup>st</sup> Indian Science Congress held at University of Jammu in February 2014 and has again been invited to deliver Invited Lecture in Chemical Science Section in 103<sup>rd</sup> Indian Science Congress to be held at University of Mysore from 3<sup>rd</sup> to 7<sup>th</sup> January 2016.**
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

**Strengths - Dedicated one permanent faculty, dedicated guest faculty, Obedient, Disciplined, regular and punctual students, good instrumental facilities, inquisitive and law abiding**

students

**Weaknesses** -More space needed for instrumental laboratories, more free space needed in analytical laboratories, inadequate subordinate staff for each lab, inadequate ministerial staff, secretarial assistance is needed.

**Opportunities:** Opportunities of growth would arise with the strengthening of teaching staff, supporting staff and space for more laboratories, classrooms etc.

**Challenges:** The biggest challenges before the Department beyond its control are namely:

1. Whereas more classrooms are needed but there are only two classrooms for two Post Graduate Courses (M.Sc.Applied Chemistry and run in the Department.
2. Ill –designed laboratory with smaller space between two working lab tables leads to possibilities of accidents. Moreover labs does not have either sitting space for teachers. There is no independent instrumentallaboratory forM.Sc. Chemistry and M.Sc.Applied Chemistry which results into crowding at times.
3. The Department does not have a Lecture theatre where all the students (around 80 or more) could be made to sit for Seminar, Workshop, Special Lecture organised for the entire department.In absence of this facility such activities are held elsewhere with difficulty.
4. Library Staff and separate room for Departmental Library is needed.
5. Computer teaching is a part of syllabus .The available Computers in the Department do not have suitable place for their placement in a laboratory. There is no Computer Operator either.The office staff posted in the Department has no knowledge of even Computer typing.
6. Department of Pure and Applied Chemistry is the biggest in terms of students in Science Faculty. The minimum staff needed for its smooth functioning is an Office Assistant, a Section Officer, a Steno, a Store-Keeper, Two more Lab Assistants and corresponding number of Lab Boys.

52. Future plans of the department -

Plans have been submitted for XIIth UGC Plan and will be submitted for XIIIth UGC Plan. University has not demanded any plan proposal by the Department other than this.

**सुदूर संवेदन  
एवं  
भू-सूचना विज्ञान  
विभाग  
DEPARTMENT  
OF  
REMOTE SENSING  
&  
GEOINFORMATICS**

1. Name of the Department : Department of Remote Sensing and Geoinformatics
2. Year of establishment : June , 2002
3. Is the Department part of a School/Faculty of the university? Yes
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
5. M.Sc. in Remote Sensing and Geoinformatics and Ph. D.
6. Interdisciplinary programmes and departments involved : All Science and Geography departments
7. Courses in collaboration with other universities, industries, foreign institutions, etc. :  
IV Semester of PG with other universities, industries and institutions
8. Details of programmes discontinued, if any, with reasons:  
PG Diploma in Remote Sensing and Geoinformatics due to shortage of Teachers
9. Examination System: Annual/Semester/Trimester/Choice Based Credit System:  
Semester System
10. Participation of the department in the courses offered by other departments  
Nil
11. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MIPS)
Professor	Nil	Nil	Nil
Associate Professors	Nil	Nil	Nil
Asstt. Professors	Nil	Nil	Nil
Others	Nil	Nil	Nil

12. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance: Faculty is Professor in Environmental Science looking after this department

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
Prof Sarvesh war Palria	M.Sc., Ph. D.	Professor Environmental Science	EIA, Pollution, Remote Sensing, GIS	23 years	Five

13. List of senior Visiting Fellows, adjunct faculty, emeritus professors :



1. Remote Sensing for Keoladeo National Park Wetland  
Sanctioned by Ministry of Environment and Forests, New Delhi  
(26-1-1997 to 27-7-01) Rs.16.0 lakhs

**B. Projects completed : (As Project Co-ordinator at National Level)**

1. Wetland Biodiversity Conservation  
ISRO National Project, Space Applications Centre (ISRO),  
Department of Space, Ahmedabad-15  
Dr.S. Palria selected as Project Co-ordinator for the Keoladeo National Park in the first phase  
of Project. (20-2-2004- 30-6-2006)  
Total Cost Rs 20.14 lakhs
2. Impact assessment, Monitoring and management of Resources due to changes in the IGBP  
Command area using Remote Sensing data.  
Sanctioned by Ministry of Environment and Forests, New Delhi (34 Lakh) Rs. 34 lakhs  
**(Sanctioned on 26<sup>th</sup> November, 2006 completed : 31 August, 2011)**

**C. Projects ongoing : (As Project Co-ordinator at National Level)**

1. ISRO National Project on RISAT Utilization.Sanctioned by Space  
Applications Centre (ISRO) , Ahmedabad  
(Sanctioned amount 7 Lacks Duration January2011-March 2014)
- 2.ISRO National Project on Prakriti – Polar Environmental Processes and Indian monsoon  
sanctioned by Space Applications Centre (ISRO) Ahmedabad  
(Sanctioned amount 7.5 Lacks Duration August, 2013-March 2016)

**D. Project as Course Coordinator**

UGC Innovative Programme on M.Sc. Remote Sensing And Geoinformatics Sanctioned  
amount 38 lakhs and one lecturer post with actual expenditure period. For Five Years (2007-  
2012)- Completed Rs. 38.40 Lakhs

21. Research facility / centre with
  - 1 state recognition
  - 2 national recognition ✓
  - 3 international recognition
21. Special research laboratories sponsored by / created by industry or corporate bodies: Nil
22. Publications:
  - \* Number of papers published in peer reviewed journals (national /international) = 28  
Papers
  - \* Monographs : Nil
  - \* Chapters in Books Three
  - \* Edited Books:Nil
  - \* Books with ISBN with details of publishers :Nil
  - \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities  
International Complete, Dare Database - International Social Sciences Directory, EBSCO  
host, etc.)
  - \* Citation Index – range / average Range 1 to 5
  - \* SNIP
  - \* SJR
  - \* Impact Factor – range / average Range 1 to 5

\* h-index

23. Details of patents and income generated :NA
24. Areas of consultancy and income generated : GIS based Tawn Mapping Project  
Total Grant **Rs. 33.25 lakhs** from Ministry of Home Affairs , Govt of India , New Delhi
25. Faculty selected nationally/internationally to visit other laboratories / institutions /industries in India and abroad  
Prof Sarvesh Palria
26. Faculty serving in
- a) National committees b) International committees c) Editorial Boards d) any other (please specify)  
Prof S. Palria Professor involved at National as well as International Committees. Some of them are as under
1. Observer, UGC NET Examination 2011, 2012
  2. Expert Member –member for evaluation of proposal for Minor Research Proposal, UGC, North Region , Bhopal
  3. Expert UGC- ISRO committee for syllabus formulation at National Level
  4. Course coordinator ISRO Programmes, Edusat Programme at IIRS , Department of Spcse , ISRO , Dehradun representing MDS University, Ajmer
  5. Member, Organising Committee , International Conference on Earth Science and Climate Change, Chicago, USA, 21-22 August, 2012.
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
- 1 Geoinformatics for Urban Infrastructure Development 3<sup>rd</sup> , January, 2005, M.D.S.University. Ajmer.
  - 2 Workshop on Innovative and facile teaching methods for better understanding of Science subjects in students. 23-24 March, 2009. M.D.S. University, Ajmer
  - 3 Tutorials on E-Governance and Desertification from 1-2-2011 to 2-2-2011 at M.D.S. University, Ajmer
  - 4 Course coordinator , Short term Training Course on Basics of Remote Sensing and Geoinformatics organized by Academic Staff College, Ajmer sanctioned by UGC. 15 -17 March 2010.
  - 5 National Conference on Impact of climate Change with special Emphasis on Desertification – Geomatics 2011 from 3-2-2011 to 5-2-2011 at M.D.S. University, Ajmer
  - 6 National Workshop on Innovative Course on Remote Sensing and Geoinformatics during 29-2-2012 Organised at M.D.S. University , Ajmer
  - 7 National Conference on Geomatics for Natural Resources and Climate change with special reference to Rainfed Agriculture and Water Resources. Organised by department from 8-9 October , 2015.
- 28. Student projects**
- percentage of students who have done in-house projects including inter-departmental projects  
50% students at M. Sc. Level

- percentage of students doing projects in collaboration with other universities /industry / institute  
50% Students at M. Sc. Level

## 29. Awards/recognitions received at the national and international level by

- Faculty
  - Prof Sarvesh Palria awarded President Appreciation Medal , Citation and cash Rs. 10000/- by ISG , Space Applications Centre Ahmedabad during 2014.
  - Prof Sarvesh Palria awarded President Appreciation Medal , Citation and cash Rs. 10000/- by ISRS , IIRS, Department of Space, Dehradun during 2015.
- Students  
Since last four years students are getting best oral paper presentation award.

## 30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

(a) National Conference on Impact of climate Change with special Emphasis on Desertification – Geomatics 2011 from 3-2-2011 to 5-2-2011 at M.D.S. University, Ajmer. Funded by ISRO, DST, Antrix Corporation, Ministry of Earth Sciences Delhi. Around 150 Senior Scientist from ISRO , State Centre Remote Sensing Directors/Scientist, University Professors attended the conference.

(b) National Workshop on Innovative Course on Remote Sensing and Geoinformatics during 29-2-2012 Organised at M.D.S. University, Ajmer. Funded by ISRO, DST, Ministry of Earth Sciences Delhi, UGC. Around 150 Senior Scientist from ISRO , State Centre Remote Sensing Directors/Scientist, University Professors attended the conference. Cabinet Minister of Agriculture , Raj State Shri Prabhu Lal Saini was the chief guest of conference.

## 31. Code of ethics for research followed by the departments : Yes

## 32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Remote Sensing and Geoinformatics	36	13	5	RA	RA

## 33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc. Remote Sensing and Geoinformatics	15	70	15	Nil

## 34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

There is not NET SET in the subject

35. Student progression

Student progression	Percentage against enrolled
UG to PG	60 %
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	
Campus selection	
<input checked="" type="checkbox"/> Other than campus recruitment	100 percent placement Other than campus recruitment
Entrepreneurs	

36. Diversity of staff : Single staff from Environment

Percentage of faculty who are graduates of the same university	
From other universities within the State	100%
From universities from other States	
from Universities outside the country	

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : Nil

38. Present details of departmental infrastructural facilities with regard to

- a) Library  
Departmental Library is having few books
- b) Internet facilities for staff and students  
Available
- c) Total number of class room            02
- d) Class rooms with ICT facility : 02
- e) Students' laboratories : 02
- f) Research laboratories : 01

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university -Ph. D. Students List
  - 1) Spatial Modeling of Carbon Pools and Fluxes of Terrestrial Biosphere in India. Awarded Ph.D. to Ms. Abha Chabra
  - 2) Evaluation of selected waterfowl habitat in Keoladeo national park using satellite data. Awarded Ph. D. to Ms. Akanksha Singh
  - 3) Remote Sensing Approach for water shed resource management in Pushkar (Raj)- Awarded Ph.D. to Mr. Rajesh Singh
  - 4) Environmental Analysis of Anasagar Wetland using Remote Sensing And GIS – Awarded Ph.D. to Mr. Naresh Choudhary
  - 5) Environmental studies of Locust breeding grounds using satellite data.- Awarded Ph.D. to Ms Anjulata Sankhla
  - 6) Study on Ungulates at Keoladeo National Park Bharatpur (Rajasthan) using High resolution satellite data.

- 7) Awarded Ph.D. to Mr. Niraj
- 8) Land degradation in assessment of Kashmir Valley using multi-sensor satellite data at different spatial scale. Awarded Ph.D. to Ashaq Hussain Sheikh
- 9) Environmental planning for Than area mineral deposits (Chotila) of Surendra Nagar district, Gujarat using satellite data. Awarded Ph.D. to Mr. Vikram Tak
- 10) Water quality in Indian desert "Study based on impacting hazards using Geo-informatics - Awarded Ph.D. to Ms. Tripti Joshi
- 11) Role of Geoinformatics in food security and sustainable livelihood in semi-arid environment- A case study for clusters of villages in semi-arid region of Jodhpur and Barmer districts- Awarded Ph.D. to Ms. Chilka sharma
- 12) Spatial decision support system for infrastructure management- A case study of electrical utility structure of Jodhpur city - Awarded Ph.D. to Ms. Pratibha Peshwa.

b) from other institutions/universities

(i) List of department student did PRE Doc/ Ph. D./ Post Doc from other institutions/universities

a) Dr Mukesh Boori

\* Post.Doc. 10/2012 "*A Combined Active/Passive Microwave Remote Sensing Approach for Hydrogeophysical Parameters*", **NOAA/NASA & University of Maryland**, College Park – **Maryland, USA**,

\* Ph.D. 08/2011 "*Environmental Impact Assessment and Management of Natural Resources in Apodi-Mossoro estuary, Northeast Brazil*" **Federal University-RN (UFRN), Natal –RN, Brazil**.

\*Pre.Doc. 08/2008 "*Earth & Environmental Science*", **Katholieke University Leuven, Belgium**.

b) Dr Shailesh Kharol: Ph.D. from Vishkhapatnam Univeristy, Andhra Pradesh; Post Doctoral Fellow, Department of Physics and Atmospheric Science, Halifax, NS, Canada

c) Dr AnuRani Sharma: Ph.D. from Vishkhapatnam Univeristy, Andhra Pradesh

d) Mr Amit Kumar Sharma: PhD Research Scholar at COSTEL, LETG, Univ. of Rennes -2, France

e) Ms. Swati Tak: Ph.D from IIT, New Delhi

40. Number of post graduate students getting financial assistance from the university. Nil
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. No
42. Does the department obtain feedback from
  - a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? No faculty
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? N/A
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback? Through Alumini meet
43. List the distinguished alumni of the department (maximum 10)

1. Dr. Mukesh Boori , Senior Scientist in Samara State Aerospace , University Russia and former Scientist NASA USA.
2. Dr. Shailesh Kharol, Post Doctoral Fellow, Department of Physics and Atmospheric Science, Halifax, NS, Canada
3. Ms. Nidhi Gehlot , Scientist SD Defence Laboratory, DRDO, Govt of India New Delhi
4. Dr. Abha Chabra, Scientist SE, Space Applications Centre, ISRO , Govt. of India , Ahmedabad
5. Ms. Pratima Tak , Research Scientist , Regional Remote Sensing Centre, ISRO, Department of Space, Govt of India ,Jodhpur currently at Centre Water Comission, Govt of India , New Delhi.
6. Ms. Veeneta Sharma Research Scientist , Regional Remote Sensing Centre, ISRO, Department of Space, Govt of India ,Jodhpur currently at Centre Water Comission, Govt of India , New Delhi.
7. Ms. Swati Tak , Department of Civil Enginnering , Indian Institute of Technology (IIT), New Delhi
8. Dr. Anu Rani Sharma, Associte Professor, Departmentof Natural Resources TERI University , New Delhi
9. Mr. Nitin Chouhan , Asstt. Professor , Department of Remote Sensing , School of Earth Sciences , Bansthali Deemed University , Bansthali (Raj)
10. Mr. Kamlesh Sharma , Senior GIS Engineer at RMSI Private Limited, Noida, India

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Department is regularly organise the special lecture and workshops involving external experts.

45. List the teaching methods adopted by the faculty for different programmes.

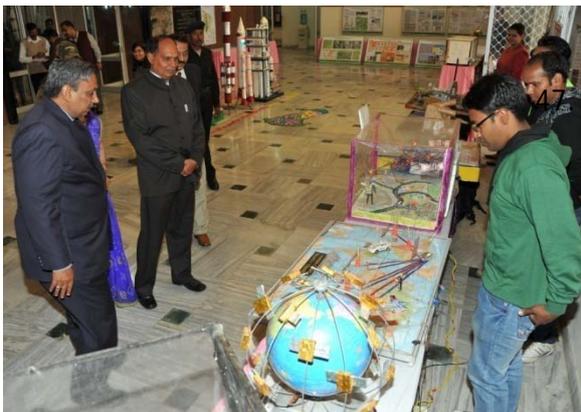
Through Smart class room facilities , Computer LCD is connected in the class rooms.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Through regular internal assessments.

Highlight the participation of students and faculty in extension activities.

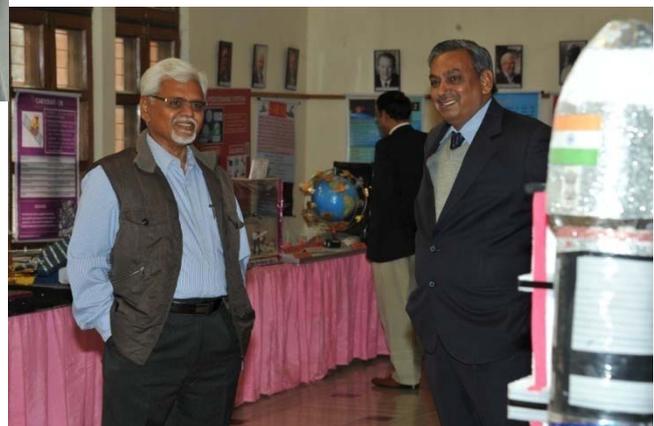
Students are exposed every year to attend national conference on subject concern to meet scientist working at differencet departments and students are also



presenting papers in the conference  
dissertation work done at M.Sc.Level

48. Give details of "beyond syllabus scholarly activities" of the department.

Celebrating Remote Sensing, GIS and Science Day regularly inviting eminent Scientist to deliver talks and students are making charts and models on satellites and



launch vehicles. Visiting other Scientific Institutions. Students are attending ISRO based out reach programme on Remote Sensing from the IIRS Department of Space , Dehradun. Organising Educational tours.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Students are appearing in Certificate courses in ISRO based out reach programme on Remote Sensing from the IIRS Department of Space , Dehradun. They are examined evaluated by ISRO and Certificate and marks are given by ISRO. Two programmes are organised by ISRO every year and students get their performance evaluated by ISRO.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Through organising Seminars, educational tours expertised lectures by eminent scientist students are getting new knowledge,

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

1. Strengths

- a. Cent percent placement
- b. Department Well recognised in the country
- c. Only department of its kind in the state and north India
- d. Support from ISRO as HOD is Ex Scientist from ISRO
- e. UGC Supported M.Sc. Remote Sensing and Geoinformatics programme Considering it as innovative programme and Approx 123 Lakhs sanctioned by various funding agencies for the department to carry out research work.

2. Weaknesses

- a. No Teaching faculty in the department
- b. No Non -Teaching staff- Lab Assstt, Lab Supervisor, GIS Lab Manger , Lab Boy etc to handle computers
- c. Sufficient furniture is not available
- d. In spite of high demand of man power in the subject permanent recruitment is less in the govt sector and work is carried out by untrained and on temporarily project based recruitment
- e. No Net ,SLET in the subject

3. Opportunities

- a. Due to launch of various satellite of high resolution trained man power in the subject is more and more in demand coming years.
- b. IT sector is converting to Geoinformatics hence lot of scope
- c. For planning and management of resources Remote sensing GIS and GPS has to play a big role and our students are trained in these technology to cater the need of private as well as Govt. Sector.
- d. In making Digital India this technology and our students have to play a big role.
- e. Prime Minister of India Mr Narendra Modi has identified approx. 173 Projects from Various Ministries of Govt to Work and use Remote Sensing and Geoinformatics Technology and hence good scope and opportunities

#### 4. Challenges :

- a. To Set up Separate department and infrastructure to cater all responsibilities and needs of the Govt and Private Sector.
- b. Sanction of Teaching and non teaching posts and their recruitment.
- c. To develop centre of excellence and to coordinate Govt Projects and ISRO Participation.
- d. To initiate the NET and SLET in the subject
- e. To Generate Employment opportunities in Govt Sector.

#### 52. Future plans of the department.

- Department is towards making it centre of Excellence in Geoinformatics and Governance.
- New Separate Building is proposed for which grant of Rs. 5 Cr. is sanctioned under RUSA by HRD , New Delhi
- Infrastructure will be developed using Rs. 2 Cr. Sanctioned under RUSA by HRD , New Delhi
- **Technology Out reach Programme is planned**  
Out reach programmes will be organized in the center to facilitate Geo-informatics technology for various govt. Sector, private sector and ultimate to common man.
- Training programmes for Administrators, teachers, Research Scholars, NGO's and govt. sector thematic applications specially for the official of watershed management, ground water, Agriculture, drought vegetation monitoring, mining area management etc.
- Appraisal Survey of oil, thermal , and Gas plants, forestry, ground water prospects, disasters prone areas etc.
- Awareness School programmes at 11<sup>th</sup> and 12<sup>th</sup> level in the field of Remote Sensing and Geo-informatics.

#### \* **Decision Support System will be setup**

Decision support system will be prepared for Rajasthan and specially for Ajmer District to support and implement the Govt. programmes and policies. Decision support system will also do the cadastral mapping (Village level) for wastelands and productive areas.

#### \* **Disaster Management Info and Support**

Center will develop the infrastructure for info and support in disaster management in Rajasthan. Flood , cyclone, forest fire, earth quake, drought related info and support system will be generated and will provide the information to support the administration at time of calamities. It will also prepare the infrastructure development in the major cities to mitigate the major traffic, accident problems.

#### \* **Out reach Site \_Satellite enabled information System**

Out reach site either in University campus or Pushkar will be planned to establish for on line information through satellite enabled information system (ISRO automatic weather station).

This will be procured and installed from Department of Space (ISRO) and impart the information related to

1. Meteorology
2. Soil Moisture
3. Evaporation
4. Salinity

#### \* **Regional Climate Change Studies**

Centre will start working on regional climate change with support and link with state and international climate centers to know the impacts of climate on resources.

\* **Publication Division**

Literature on the subject will be prepared and distributed to various sector for awareness and optimum utilization of this technology to common man which is the ultimate goal of space programme.

\* **Consultancy services**

The centre will start consultancy services in the field of Geo-informatics to generate the sources and income.

\*\*\*\*\*

**प्राणी शास्त्र  
विभाग  
DEPARTMENT  
OF  
ZOOLOGY**

1. Name of the Department –Zoology Department
2. Year of establishment –July,1990
3. Is the Department part of a School/Faculty of the university? – Science Faculty
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt., etc.)  
Post Graduate (M. Sc.) & P.G. Diploma Laboratory Technology and Instrumentation with Spl. In Medical Laboratory Technology
5. Interdisciplinary programmes and departments involved –None
6. Courses in collaboration with other universities, industries, foreign institutions, etc. – Collaboration with J L N Medical College, Ajmer
7. Details of programmes discontinued, if any, with reasons – None
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System – Annual and Semester
9. Participation of the department in the courses offered by other departments – None
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	Data with Estt.	1 (till 31.12. 2013)	Nil
Associate Professors		Nil	Nil
Asstt. Professors		Nil	Nil

Other Guest Faculty: As per Requirement: 09

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance –No Regular Faculty
12. List of senior Visiting Fellows, adjunct faculty, emeritus professors-.  
Emeritus professors—01  
Dr. M.C. Sathyanarayna Duration-2011-13
13. Percentage of classes taken by temporary faculty – programme-wise information  
100% Classes taken by the Guest Faculty or Retried Teachers of Government Colleges or Privates Colleges.
14. Programme-wise Student Teacher Ratio –73:09
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual -02 Technical Staff and 01 Lab boy., 01 Administrative Staff and 01 Class IV Staff
12. Research thrust areas as recognized by major funding agencies – Molecular Developmental Biology till December 2013



1. Core Faculty, DST-SERB School of Herpetology,
  2. Editorial Board, IJEAC,
  3. Core Advisor, Save the frogs, International, USA
  4. Advisor, MGDC, Switzerland
  5. Chair Person, State Biodiversity Board, Rajasthan (Animal Sciences)
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).

### Student projects

- percentage of students who have done in-house projects including inter-departmental projects ---100%
  - percentage of students doing projects in collaboration with other universities/Industry/ institute –Yes, With J.L.N. Medical College, Ajmer for the students of P.G. Diploma Lab. Technology and Instrumentation
29. Awards/recognitions received at the national and international level by –Yes.
- Faculty
  - Doctoral/post doctoral fellows –Vivek Sharma, Research Scholar, Travel Grant-Actual to the Montreal, Canada (WC-8) –21-24, August, 2011
  - Students
30. Seminars/Conferences/Workshops organized and the source of funding (national /International) with details of outstanding participants, if any. –
- Training Programme on Alternatives of Animal Dissection to replace the animals in Practical Classes -29<sup>th</sup> April, 2011.
  - Seminar on Serious concerns about declining population of frogs and their conservation issues. 28<sup>th</sup> April, 2012.
  - Wildlife Week 1-7th October 2012
  - Seminar cum workshop on Ahimsa in progressive curriculum of Zoology : Digital Technology and Live Zoology.19-20 January,2013
  - Wildlife Week 1-7th October 2013
  - Refresher Course in Zoology from 00-08-2013 to 00-09-2013
  - Training Cum Workshop on Impact of Digital Alternatives of Animal Dissection and Live Zoology on biodiversity-with Collaboration or MGDC, Tiruchirapalli and SEWA, Jaipur.13<sup>th</sup> December,2013
  - Wildlife Week 1-7th October 2015
31. Code of ethics for research followed by the departments
32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Master Degree in Zoology	70	11	12	100%	100%
Post Graduate Diploma in Laboratory Technology and Instrumentation	25	11	14	100%	100%

33. Diversity of students

Name of the Programme	% of Students	% of students from other	% of students of	% of students

(refer to question no. 4)	<b>from the Same university</b>	<b>universities within the State</b>	<b>from universities outside the State</b>	<b>from other countries</b>
Master Degree in Zoology	52%	44%	4%	nil
Post Graduate Diploma in Laboratory Technology and Instrumentation	84%	16%	nil	nil

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. SET: 2, State Police services 2 (Annexure II)

35. Student progression

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	Department run only PG Course
PG to M.Phil.	Nil
PG to Ph.D.	7.6%
Ph.D. to Post-Doctoral	Nil
Employed	
☐ Campus selection	
☐ Other than campus recruitment	Most of them by different agencies of Governments and Privates
Entrepreneurs	

### 36. Diversity of staff

<b>Percentage of faculty who are graduates</b>	
of the same university	33.33
from other universities within the State	33.33
from universities from other States	33.33
from universities outside the country	

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period –No.

38. Present details of departmental infrastructural facilities with regard to

- Library –No
- Internet facilities for staff and students –Yes
- Total number of class rooms -03
- Class rooms with ICT facility -yes
- Students' laboratories -02

- f) Research laboratories -02
39. List of doctoral, post-doctoral students and Research Associates
- a) from the host institution/university 04-(1) Vivek Sharma, (2) Shikha Mathur, (3) Tripti Dadhich,(4) Poonam Singh
- b) from other institutions/universities –01 (Swati Tyagi)  
01 (Dr. Jai Bahadur Singh Kachhawa-DS Kothari Post Doc Fellowship)
40. Number of post graduate students getting financial assistance from the university. Professional Faculty Fund merit scholarship: One each in M.Sc, Previous, M.Sc. Final and PG Diploma
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. No
42. Does the department obtain feedback from
- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
- b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
- c. Alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10)
1. Dinesh Meena, Andaman & Nicobar Police, (2012)
  2. Mukesh Kumar Kumawat, Rajasthan Police (2012)
  3. Abhay adi Gaur, Rajasthan Education Deptt. (2012)
  4. Brij Bihari Sharma, Rajasthan Education Deptt (2013)
  - 5 Lalit Kanver, Rajasthan Education Deptt (2013)
  6. Ram Sharma, Rajasthan Education Deptt (2012)
  7. Om Prakash, Rajasthan Education Deptt (2012)
  8. Nitesh Sharma, Rajasthan Education Deptt (2012)
  9. Yogash Sharma, Rajasthan Education Deptt (2012)
  10. Ravi Rai, U.P. Education Deptt (2015)
44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts. –
- Dr. M.A. Akbarsho, Bhartidasan University, Tiruchillipall , Special lecturer on digital altaranative techniques Sept,2013
  - Dr. Roopa Huru, North Estan Hill University, Shilong— Special Lecturer on Developmental biology on August, 2011
  - Dr. H.S. Rathore, Vikram University, Ujjain— Special Lecturer on Developmental biology on 4, August, 2013
45. List the teaching methods adopted by the faculty for different programmes. –  
Alternative Dissection Techniques,  
Modern Digital Tools and Image Analysis Techniques
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

By regular monitoring, discussing with the students and alumni

47. Highlight the participation of students and faculty in extension activities. No.

48. Give details of "beyond syllabus scholarly activities" of the department. – Conservation of different species of Animals, Awareness activities for the locals and society

- November, 2011: Reptile awareness programme



- November, 2012: Visit of M.P.S. School Students to the department
- October, 2012: Wild life week with community participation
- October, 2012: Animal awareness programme by charts and visit some areas where Fresh water bodies are present
- November, 2012: Seminar on youth participation in Biodiversity conservation
- August, 2013: Visit Prof. R.N. Hooroo , University of Shilong and lecture on animal conservation
- July, 2013: Water conservation awareness Programme
- March, 2013: Celebrating World Sparrow Day by the department
- April, 2013: Training at snake Park, Ujjain by snake park trainers
- December, 2014: Birds awareness programme at Dungarpur
- October, 2015: Field trail of Students in wild life week
- 01 December, 2015: AIDS Day
- September, 2016: Bird watching at Karauli



- September, 2011: Live zoology trail by the students of PG - Ajaypal , Ajmer
- November, 2011: Dinosaur Model making by the students of P.G.in Zoology
- October, 2011 : Wild life week
- September, 2012: Animal Awareness Programme among locals of Maulasar (Didwana)



49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. –No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied. Development of Ex-situ Conservation Centre for Study of Live Zoology.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

1. Use different modern tools and study of conservation biology
2. Department of Zoology, M D S University, Ajmer was amongst the first in India that gave ideas in reducing animal killing in teaching for Under graduate and post graduate students.
3. Outcomes of students Live Zoology projects were published in International and national reposes of journal

Weaknesses

No regular faculty in the department.

52. Future plans of the department.

Implementation of 3R (Reduce, Refine and Replace) animal Killing in teaching.

Prepare a conservation action plan for the species, Development of Ex-situ Conservation Centre

## Annexure I

## Publications

**Prof KK Sharma**

1. Kachhawa, J.B.S., Sharma, A., Gupta, R.S. and Sharma, K. K. (2010) Evaluation of reversible contraceptive efficacy of methanol extract of *Momordica dioica* root in male albino rats. *Journal of Reproduction and Infertility*. 1(3): 71-78. **SJR 0.3 H Index 5**
2. Sharma, K. K., Sharma, Vivek and Mathur, S. (2010) "FEJERVERYA LIMNOCHARIS (paddy field frog) DIET" (Natural History Note) *Herpetological Review* 41 (4) :473 **SJR 0.32 H Index 25**
3. Kachhawa, J.B.S., Gupta, R.S. and Sharma, K. K. (2011). Ethnopharmacological evaluation of male contraceptive efficacy of *Dendrophthoe falcata* in albino rats. *Planta Medica*. 05:39. **SJR 0.69 H Index 83**
4. Sharma, K. K., Akbarsha, M. A., Sharma Vivek, Sharma Neha and Sharma Nihar. (2011). Live zoology and digital technologies as effective alternatives for animal use in zoology curriculum. *Altex* 28: 208. **SJR 0.85 H Index 26 JIF 5.467**
5. Kachhawa, J.B.S., Gupta, R.S. and Sharma, K. K. (2011). Evaluation of contraceptive potential of isolated fractions from *Dendrophthoe falcata* stem methanol extract in male albino rats. *Planta Medica*. 05:77. **SJR 0.69 H Index 83**
6. Sharma, K.K., Kachhawa, J.B.S., Sharma, N. and Tyagi, S. (2011). Screening of Indian medicinal plants for their antimicrobial property. *Planta Medica*. 05: 73. **SJR 0.69 H Index 83**
7. Sharma Vivek, Sharma Neha, Sharma Yashodhra, Akbarsha, M. A. and Sharma, K. K. (2011). Molecular tools can obviate animal killing in biosystematics studies of Anurans. *Altex* 28 : 252-253. **SJR 0.85 H Index 26 JIF 5.467**
8. Sharma Neha, Sharma Vivek, Akbarsha, M. A. and Sharma, K. K. (2011). Genotoxicity evaluation of molecules possessing antifertility potential: Testing in microorganisms as an alternative to animal testing. *Altex* 28: 104. **SJR 0.85 H Index 26 JIF 5.467**
9. Sharma, K. K., Sharma Vivek and Sharma Neha (2011). New locality records and distribution extension of *Hemidactylus triedrus* Daudin, 1802 (Squamata, Gekkonidae) at the North-East parts of Aravalli ranges, Rajasthan, India. *Herpetology Notes* 4: 023-024. **SJR 0.26 H index 8**
10. Sharma Vivek, Sharma Neha, Kishor Jugal, Jangir, B. L. and Sharma, K. K. (2011). New locality record of *Chamaeleo zeylanicus* (Laurenti) from certain semi arid areas of the Thar Desert of Rajasthan. *Herpetology Notes* 4: 287-289. **SJR 0.26 H index 8**
11. Sharma, K. K., Akbarsha, M. A., Sharma Vivek, Sharma Neha and Sharma Nihar. (2011): Live zoology and digital technologies as effective alternatives for animal use in zoology curriculum. *Altex* 28: 208. **SJR 0.85 H Index 26 JIF 5.467**
12. Sharma, K. K., Sharma Vivek and Sharma Neha (2011): New locality records and distribution extension of *Hemidactylus triedrus* Daudin, 1802 (Squamata, Gekkonidae) at the North-East parts of Aravalli ranges, Rajasthan, India. *Herpetology Notes* 4: 023-024. **SJR 0.26 H index 8**
13. Sharma, K.K., Kachhawa, J.B.S., Sharma, N. and Tyagi, S. (2011): Screening of Indian medicinal plants for their antimicrobial property *Planta Medica*. 05: 73. **SJR 0.69 H Index 83**
14. Sharma, K. K., Sharma, Vivek, Sharma N. and Rohilla, M.S. (2012): "*Calotes versicolor* (Common Garden Lizard) Avian Predation" (Natural History Note) *Herpetological Review* 43 (4) 645pp. **SJR 0.26 H index 8**
15. Sharma, K. K. (2012): Identification and monitoring the population of Anurans of the Thar Desert and nearby vicinity using bioacoustic tools. *Bioacoustics Journal* Vol- IV.
16. Sharma, K. K., Jaju Sonal, Sharma Vivek, Sharma Neha, Tyagi Swati and Kachhawa, J.B.S.K. (2012): Evaluation of Antibacterial potential of skin extracts of some anurans from Central Aravalli foothills, Rajasthan. *Journal of Pharmacy Research*. 5 (1): 534-537. **SJR 0.19 H index 5**
17. Sharma, K. K. (2013): Modern tools of Species identification can save millions of animals killed in identification and animal taxonomy. *ALTEX* (Switzerland), 2(1): 65-68. **SJR 0.85 H Index 26 JIF 5.467**
18. Sharma Vivek, Meena Dinesh, Kumawat Rakesh Kumar, Yadav Divaker and Sharma, K. K. (2014). Interspecies mating interactions between *Duttaphrynus stomaticus* (Marbled Toad) and *Sphaerotheca breviceps* (Indian burrowing frog) at the central Aravalli foothills, Rajasthan, India. *Herpetology Notes* (UK). Vol. 7: pp 139-140 **SJR 0.26 H index 8**
19. Sharma, K. K., Sharma Vivek, and Sharma Neha (2010). Observations on the Desert Monitor Lizard (*Varanus griseus*) in the Thar Desert, Rajasthan, India and Recent Threats to its population. *Cobra*, 4 (II) :26-28 .

20. Sharma, K. K., Sharma Vivek, Kishor Jugal, Nagar Purushottam and Sharma Neha (2010). Observations on Smooth Racer Snake *Coluber ventromaculatus* (Squamata, Colubridae) at Central Aravalli foothills, Ajmer, Rajasthan, India. *Cobra*, Vol 4 (11): 23-25 .
21. Sharma, K. K., Sharma Neha and Sharma Vivek (2010). Current status and distribution of anurans from foothills of Aravalli ranges at central Rajasthan, India. *Flora and Fauna*. 16 (2) : 244-248.
22. Sharma, K. K. and Pandey, A. K. (2010): Phytosociological study of vegetation of some selected arid region of the Thar Desert of Rajasthan, India. *Current World Environment*. 4(2): 22-27.
23. Sahani Lata and Sharma K.K. (2010): Studies on pattern formation of heart of an anuran under the influence of retinol palmitate. Ed. A. Kumar. Genius Publication ISBN 978-93-803-11-14-2 Pp. 282-288.
24. Kachhawa, J.B.S., Gupta, R. S. and Sharma, K.K. (2010) A review on therapeutic plants possessing contraceptive activities in males. In the book "*Recent Advances in Medicinal Plants: Phytopharmacology and Therapeutic Values Drug Plants IV*" Edited by V.K. Singh and J.N. Govil, Indian Agricultural Research Institute. Studium Press LLC, USA. ; Vol. 30: 181-214.
25. Mehra, S., Mehra, S. P. & Sharma, K. K. (2010). Aquatic Avifauna: Its Importance for Wetland Conservation in Rajasthan, India. *Proceedings of Conservation of Lakes and Water Resources: Management Strategies* Feb 19-20, 2010. 202-214pp.
26. Kachhawa, J.B.S., Gupta, R.S. and Sharma, K.K. (2011): A progressive urological disease in aging man: benign prostatic hyperplasia. *Bhartiya Vaigyanik Evam Audyogik Anusandhan Patrika*. 2011; 19(1): 59-65.
27. Mehra, S., Mehra S. P. and Sharma, K.K. (2011): Aquatic avifauna of Aravallis, Rajasthan, India. Eds. V.K. Gupta and A. K. Verma, Vol 1. Chapter 7 "*Animal Diversity, Natural History and Conservation*" *Daya Publishing House*, New Delhi. pp 145-168.
28. Sharma Vivek, Sharma Neha, Kishor Jugal, Jangir, B. L., Dutt Umesh, Meena Dinesh and Sharma, K. K. (2011): Occurrence, distribution and Recent Threats of Indian Star Tortoise *Geochelone elegans* (Schoepff, 1795) in the Central Aravalli mountain ranges, Rajasthan, India. *Cobra* 5 (1): 20-26.
29. Sharma Vivek, Sharma, K. K. and Sharma Neha. (2011): Recent threats and conservation strategies of anurans at Central Aravalli foothills of Rajasthan, India. *Frog Leg*. Vol. 17: pp 09-15.
30. Sharma Vivek, Sharma Neha, Kishor Jugal, Jangir, B. L., Dutt Umesh, Meena Dinesh and Sharma, K. K. (2011). Occurrence, distribution and Recent Threats of Indian Star Tortoise *Geochelone elegans* (Schoepff, 1795) in the Central Aravalli mountain ranges, Rajasthan, India. *Cobra* 5 (1): 20-26.
31. Kachhawa, J.B.S., Gupta, R.S. and Sharma, K.K. (2011). A progressive urological disease in aging man: benign prostatic hyperplasia. *Bhartiya Vaigyanik Evam Audyogik Anusandhan Patrika*. 2011; 19(1): 59-65.
32. Mehra, S., Mehra S. P. and Sharma, K.K. (2011). Aquatic avifauna of Aravallis, Rajasthan, India. Eds. V.K. Gupta and A. K. Verma, Vol 1. Chapter 7 "*Animal Diversity, Natural History and Conservation*" *Daya Publishing House*, New Delhi. pp 145-168.
33. Sharma, K. K., Sharma, Vivek, Mehra, S.P. and Mehra, S. (2012): First report of *Kaloula taprobanica* Parker, 1934 from Rajasthan, along with updated list of anurans and their revised distribution in Rajasthan, India. *Journal of Bombay Natural History Society* 109 (3) 645pp.
34. Joshi, K., Sharma, K.K., Sharma, R. A., Sharma Vivek, Kachawwa, J.B.S., Singh, P., Mathur, S. And Tyagi, S. (2012): Evaluation of Wound Healing Potential of Aqueous Leaf Extract of *Mangifera indica*. *International Journal on Biotechnology and Bioengineering Research* 3(2): 81-86.
35. Kachhawa, J.B.S., Sharma, N., Tyagi, S. and Sharma, K. K. (2012): Screening of stem bark methanol extract of *Annona squamosa* for antibacterial activity. *International Journal of Current Pharmaceutical Research*. 4(1): 48-50.
36. Kachhawa, J.B.S., Sharma, N., Tyagi, S., Gupta, R.S. and Sharma, K. K. (2012): Antibacterial activity of *Alstonia scholaris*: an in vitro study. *International Journal of Pharmaceutical Sciences Review and Research*. 12 (2): 40-41 **SJR 0.2, H index 13**.
37. Khatri, T., Sharma, K. K. and Khatri, T. C. (2012): Immature Stages of common awl: *Hasora badra badra* from Andaman Island (Insecta: Lepidoptera: Rhopalocera; Hesperidae). *Flora and Fauna*, 18(2): 286-288.
38. Khatri, T., Sharma, K. K. and Khatri, T. C. (2012): Immature Stages of Andaman tailed jay: *Graphium Agamemnon andamana* – A rare endemic subspecies of Andamans. (Insecta: Lepidoptera: Rhopalocera; Papilionidae). *Flora and Fauna*, 18(1): 89-92.

39. Mehra, S, Mehra, S. P. & Sharma, K. K. (2012): Aquatic Avifauna: It's Importance for Wetland conservation in Rajasthan, India. Pg. 179-190. (In: Mathur, S. M.; Shrivastava, V. K. & Purohit, R. C. (eds.) Conservation of Lakes and Water Resources Management strategies, Himanshu Publications, Udaipur, 2011) (978-81-7906-263-0)
40. Mehra, S, Mehra, S. P. & Sharma, K. K. (2012): Importance of aquatic avifauna in southern Rajasthan, India. Pg. 159-183. (In: Rawat., M. & Dookia, S. (eds.) Biodiversity of Aquatic Resources, Daya Publishing House, Delhi, 2012) (978-81-7035-789-6)
41. Sharma Vivek, Kumawat, R., Meena, D., Yadav, D. And Sharma K.K. (2012): Record of Tailed Jay Butterfly *Graphium agamemnon* (Linnaeus, 1758) (Lepidoptera, Papilionidae) from central Aravalli foothills, Ajmer, Rajasthan, India. Journal on New Biological Reports, 1(1): 17-20.
42. Sharma Vivek, Kumawat, R., Yadav, D., Kumar, A., Meena, D., Kumawat, N.K. and Sharma K.K. (2012): Avian fauna of Shrawan Sagar (Wetland near central Aravalli foothills): distribution, current status and recent threats. International Journal of Environment & Animal Conservation, Vol. 1 (2), 16-24.
43. Sharma Vivek, Meena Dinesh, Kumawat Rakesh and Sharma, K.K. (2012): Assessment of faunal diversity in and around certain wetlands of Central Aravalli foothills of Rajasthan. International Journal of Environment & Animal Conservation, Vol. 1 (1), 34-37.
44. Sharma Vivek, Sharma K.K., Kachhawa, J.B.S., Kumawat, R., Meena, D., Yadav, D., Kumar, A. and Kumawat, N.K. (2012): Impact of urbanization and associated anthropogenic activities on serpent fauna of central Aravalli foothills of Rajasthan. International Journal of Environment & Animal Conservation, Vol. 1 (2), 44-48.
45. Sharma Vivek, Sharma Neha, Sathyanarayana, M.C., Sharma Yashodhra, Kachhawa, J.B.S., Tyagi Swati and Mathur Shikha (2012): Impact of recycling distillation technique Sharma (2004) in conservation of water in laboratories and Industries. International Journal of Environment & Animal Conservation, Vol. 1 (1), 42-45.
46. Sharma Vivek, Sharma, N., Adigaud, A.K., Kumawat, R., Meena, D., Sharma, Y. and Sharma, K.K. (2012): A case of avian predation of the Indian Skipper Frog *Euphylyctis cyanophylyctis*. Cobra, VI (1): 34-35.
47. Sharma, K.K., Sharma Vivek, Sharma Neha, Sharma Yashodhra, Mathur Shikha, Sathyanarayana, M.C. and Kachhawa, J.B.S. (2012): Traditional Practices of Animal Dissection is skill Development or Anatomy Learning? International Journal of Environment & Animal Conservation, Vol. 1 (1), 46-49.
48. Sharma K.K., Sharma Vivek, Kumawat Rakesh and Sharma Neha (2013): Some Major Threats to Herpetofauna of Central Aravalli Ranges and Thar Desert of Rajasthan, India. In "Climate Change Bio-Diversity and Green Economy" (Eds. Sharma, H.S., Padmaja, S. and Sharma, G.) pp. 144-154. Concept Publishing Company Pvt. Ltd. New Delhi.
49. Sharma Vivek, Kumawat, R. K., Meena, D., Yadav, D., Kumar, A., Kumawat, N. K. and Sharma K.K. (2013): Sighting of Greater Painted Snipe *Rostratula benghalensis* at wetlands of central Aravalli foothills, Ajmer, Rajasthan. Journal on New Biological Reports, 2(2): 99-102.

#### **Publications by students**

1. Sharma Vivek, Lawaniya, N. K., Yadav, D., Jangid, A. K., Dhawal, O., Yadav, O., Sharma, S. and Sharma, K.K. (2015): Records of White-naped Woodpecker (*Chrysocolaptes festivus*), from Todgarh Raoli Wildlife Sanctuary, Rajasthan. Journal of New Biological Reports, Vol. 4(3): 243-246.
2. Sharma Vivek, Kumawat, R.K., Meena, D., Yadav, D., Kumar, A., Kumawat, N.K. and Sharma, K.K. (2015): Sighting of Western Reef Egret *Egretta gularis* in Sirohi District, Rajasthan. Indian BIRDS, Vol. 10(5): 125.
3. Sharma Vivek, Sharma, L., Rakesh, K.K. and Sharma, K.K. (2015): Sighting of Partial albino Common House Crow *Corvus splendense* from Central Aravalli foothills, Ajmer, Rajasthan. Journal of New Biological Reports, Vol. 4(2): 162-163.
4. Sharma Vivek, Meena Dinesh, Kumawat, R. K., Yadav Divaker, Kumawat, N. K. and Sharma, K.K. (2014): Mining and habitat encroachment: a major threat to the population of *Hemidactylus triedrus* at central Aravalli foothills, Rajasthan, India. International Journal of Environment & Animal Conservation, Vol. 3 (2), 01-08.
5. Sharma Vivek, Dutt Umesh, Kumawat Rakesh Kumar, Meena Dinesh, Yadav Divaker, Kumawat Naresh Kumar, Sharma Neha and Sharma, K. K. (2014): A Comparative Study of Herpetofauna in Urban and Peripheral Forest Areas of Some Parts of Southern Rajasthan, India. Cobra. Vol. VIII (1): pp 10-20.

6. Sharma Vivek, Kumawat, R. K., Meena, D., Yadav, D., Kumar, A., Kumawat, N. K. and Sharma K.K. (2013): Sighting of Greater Painted Snipe *Rostratula benghalensis* at wetlands of central Aravalli foothills, Ajmer, Rajasthan. *Journal on New Biological Reports*, 2(2): 99-102.
7. Sharma, K.K., Sharma Vivek, Sharma Neha and Mathur Shikha (2013): Bioacoustic Analysis of Certain Herpetofauna of the Thar Desert and Central Aravalli of Rajasthan, India. Pp 216-237. *Acoustics 2013 New Delhi "Technologies for a Quieter India"* held on 10-15 November, 2013 at CSIR-National Physical Laboratory, New Delhi. Organized by Acoustical Society of India (ASI), French Acoustical Society (SFA) and CSIR-National Physical Laboratory [Oral Presentation].
8. Sharma, K. K., Sharma, Vivek, Mehra, S.P. and Mehra, S. (2012): First report of *Kaloula taprobanica* Parker, 1934 from Rajasthan, along with updated list of anurans and their revised distribution in Rajasthan, India. *Journal of Bombay Natural History Society* 109 (3) 645pp.
9. Sharma, K. K., Sharma, Vivek, Sharma N. and Rohilla, M.S. (2012) "*Calotes versicolor* (Common Garden Lizard) Avian Predation" (Natural History Note) *Herpetological Review* 43 (4) 645pp.
10. Sharma Vivek, Sharma K.K., Kachhawa, J.B.S., Kumawat, R., Meena, D., Yadav, D., Kumar, A. and Kumawat, N.K. (2012): Impact of urbanization and associated anthropogenic activities on serpent fauna of central Aravalli foothills of Rajasthan. *International Journal of Environment & Animal Conservation*, Vol. 1 (2), 44-48.
11. Sharma Vivek, Kumawat, R., Yadav, D., Kumar, A., Meena, D., Kumawat, N.K. and Sharma K.K. (2012): Avian fauna of Shrawan Sagar (Wetland near central Aravalli foothills): distribution, current status and recent threats. *International Journal of Environment & Animal Conservation*, Vol. 1 (2), 16-24.
12. Joshi, K., Sharma, K.K., Sharma, R. A., Sharma Vivek, Kachawwa, J.B.S., Singh, P., Mathur, S. And Tyagi, S. (2012): Evaluation of Wound Healing Potential of Aqueous Leaf Extract of *Mangifera indica*. *International Journal on Biotechnology and Bioengineering Research* 3(2): 81-86.
13. Sharma Vivek, Kumawat, R., Meena, D., Yadav, D. And Sharma K.K. (2012): Record of Tailed Jay Butterfly *Graphium agamemnon* (Linnaeus, 1758) (Lepidoptera, Papilionidae) from central Aravalli foothills, Ajmer, Rajasthan, India. *Journal on New Biological Reports*, 1(1): 17-20.
14. Sharma, K.K., Sharma Vivek, Sharma Neha, Sharma Yashodhra, Mathur Shikha, Sathyanarayana, M.C. and Kachhawa, J.B.S. (2012): Traditional Practices of Animal Dissection is skill Development or Anatomy Learning? *International Journal of Environment & Animal Conservation*, Vol. 1 (1), 46-49.
15. Sharma Vivek, Sharma Neha, Sathyanarayana, M.C., Sharma Yashodhra, Kachhawa, J.B.S., Tyagi Swati and Mathur Shikha (2012): Impact of recycling distillation technique Sharma (2004) in conservation of water in laboratories and Industries. *International Journal of Environment & Animal Conservation*, Vol. 1 (1), 42-45.
16. Sharma Vivek, Meena Dinesh, Kumawat Rakesh and Sharma, K.K. (2012): Assessment of faunal diversity in and around certain wetlands of Central Aravalli foothills of Rajasthan. *International Journal of Environment & Animal Conservation*, Vol. 1 (1), 34-37.
17. Sharma, K. K., Jaju Sonal, Sharma Vivek, Sharma Neha, Tyagi Swati and Kachhawa, J.B.S.K. (2012). Evaluation of Antibacterial potential of skin extracts of some anurans from Central Aravalli foothills, Rajasthan. *Journal of Pharmacy Research*. 5 (1): 534-537.
18. Sharma Vivek, Sharma, N., Adigaud, A.K., Kumawat, R., Meena, D., Sharma, Y. and Sharma, K.K. (2012): A case of avian predation of the Indian Skipper Frog *Euphylyctis cyanophlyctis*. *Cobra*, VI (1): 34-35.

**PUBLICATIONS (Book Chapters):**

- 1 Sharma K.K., Sharma Vivek, Kumawat Rakesh and Sharma Neha (2013): Some Major Threats to Herpetofauna of Central Aravalli Ranges and Thar Desert of Rajasthan, India. *In "Climate Change Bio-Diversity and Green Economy"* (Eds. Sharma, H.S., Padmaja, S. and Sharma, G.) pp. 144-154. Concept Publishing Company Pvt. Ltd. New Delhi.

**Annexure II****Students who qualified National/State level tests**

1. Dinesh Meena, Andaman & Nicobar Police, (2012)
2. Mukesh Kumar Kumawat, Rajasthan Police (2012)
3. Abhay adi Gaur, Rajasthan Education Deptt. (2012)
4. Brij Bihari Sharma, Rajasthan Education Deptt (2013)
- 5 Lalit Kanver, Rajasthan Education Deptt (2013)
6. Ram Sharma, Rajasthan Education Deptt (2012)
7. Om Prakash, Rajasthan Education Deptt (2012)
8. Nitesh Sharma, Rajasthan Education Deptt (2012)
9. Yogash Sharma, Rajasthan Education Deptt (2012)
10. Ravi Rai, U.P. Education Deptt (2015)
11. Sulakha Jha, Delhi Education Deptt (2013)
12. Kanishka Charan SET 2012
13. Brij Bihari Sharma SET (2014)

# FACULTY OF SOCIAL SCIENCE

ECONOMICS  
HISTORY  
POLITICAL SCIENCE  
POPULATION STUDIES



MAHARSHI DAYANAND SARASWATI  
UNIVERSITY

AJMER

**अर्थशास्त्र  
विभाग**

**DEPARTMENT  
OF  
ECONOMICS**

1. **Name of the Department :** Economics
2. **Year of establishment :** 1992
3. **Is the Department part of a School/Faculty of the university?** Faculty of Social Science
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.):**
  - M.A. Economics
  - M.B.A. (Business Economics)
  - M.Phil.
  - Ph.D.
5. **Interdisciplinary programmes and departments involved:**  
M.B.A. (Business economics): Yogic Science & Human Consciousness and Management  
  
Department will offer 1 credit course on Basics of Economics for the students under CBCS scheme as a foundation course from the session 2016-17  
  
Algae Biofuel & Biomolecules Centre: A Study Centre established for Interdisciplinary Research & Outreach Program involving Faculty from Microbiology, Food Science & Nutrition, Environmental Science, Economics and Management
6. **Courses in collaboration with other universities, industries, foreign institutions, etc. :** Nil
7. **Details of programmes discontinued, if any, with reasons :** No
8. **Examination System:** MA Economics (Annual), all others in Semester Scheme
9. **Participation of the department in the courses offered by other departments:**  
Foods & Nutrition & Microbiology: Dr. Shiv Dayal Singh teaching of segments of syllabus dealing with Biostatistics.
10. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	Nil	Nil
Associate Professor		Nil	
Assistant Professor	1	(Promoted to Associate Professor through CAS)	Nil

11. **Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M.Phil. students guided for the last 4 years
Shiv Dayal	Ph.D. & M.A.	Professor	Development	21	3

Singh	Economics		Economics, Demography		
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12. **List of senior Visiting Fellows, adjunct faculty, emeritus professors:**

**Adjunct Faculty:**

**Department of Management Studies:**

Prof. Shiv Prasad for Accounting & Finance,  
Dr. Ashish Pareek for Business Environment & Communication  
Dr. Lara Sharma for Business Ethics & Stress management

13. **Percentage of classes taken by temporary faculty – programme-wise information:**

**M.A. Economics:** 60% Guest Faculty + 5% by Adjunct Faculty (Appendix I)

**M.B.A. (Business Economics):** 80 % guest faculty+5% by adjunct Faculty

**M. Phil.** 30% Guest Faculty +10% by Adjunct Faculty

14. **Programme-wise Student Teacher Ratio**

M.A. 39:4

M.B.A. (Bus. Eco.)11:3

Ph.D. 8:1

15. **Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual**

Designation	Sanctioned	Filled	Actual
LDC	1	1	1
IV Class	1	1	1

16. **Research thrust areas as recognized by major funding agencies : NA**

17. **Number of faculty with ongoing projects from a) National funding agencies, b) International funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.**

**a) National funding agencies**

**Ongoing Project**

1. "A Comparative Study of Socio-Economic Development of BIMARU States in India" PI: Dr. Vikas Yadav, Mentor: Dr. Shiv Dayal Singh Rs. 16.74 lakh from 16.11.15 to 15.11.18

**Major Research Project completed**

b) **International funding agencies :** Nil

c) **Total Funding since :** Nil

18. **Inter-institutional collaborative projects and associated grants received**

**a) National collaboration**

**b) International collaboration**

19. **Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.** Nil

20. **Research facility/centre with state recognition :** Nil
- **national recognition** Nil
- **international recognition :** Nil
21. **Special research laboratories sponsored by/created by industry or corporate bodies :** Nil
22. **Publications:**  
**Number of papers** published in peer reviewed journals (national/ international) 6 (Appendix II)
- \* **Monographs :** Nil
  - \* **Chapters in Books** 3 (Appendix II)
  - \* **Paper Published in Symposium Proceedings** 1 (Appendix II)
  - \* **Edited Books:** 1
  - \* **Books with ISBN with details of publishers:** Nil
- Income generated:** Nil
23. **Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad**
24. **Faculty serving in**  
 a) **National committees**
- Shiv Dayal Singh**
- Facilitator cum evaluator CAPART, Ministry of Rural Development , Govt. Of India
  - Expert Selection Committee in RPSC
  - Evaluator in State level examination
- b) **International committees** Nil
- c) **Editorial Boards** Nil
- d) **any other (please specify)**
27. **Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).**

**Shiv Dayal Singh attended**

	<b>Name of the Course/Summer School</b>	<b>Place</b>	<b>Duration</b>	<b>Sponsoring Agency</b>
1	Orientation Course	Rajasthan University, Jaipur	23.9.1996-19.10.1996	UGC
2	Refresher Course in Population Studies/Demography	International Institute for Population Sciences, Mumbai	02.12.1998-27.12.1998	UGC
3	Refresher Course in Economics	MDS University, Ajmer	21.02.2002-13.03.2002	UGC
4	Refresher Course in Environmental Studies	MDS University, Ajmer	09.03.2004-29.03.2004	UGC
5	Workshop on Algae Cultivation and Biofuel Production			

**28. Student projects**

- Percentage of students who have done in-house projects including inter-departmental projects : 100%
- Percentage of students doing projects in collaboration with other universities/industry / institute : Nil
- Students of other universities working at MDS University Ajmer for collaborative Research work: Nil

**29. Awards/recognitions received at the national and international level****National Recognitions of the Department**

- Faculty: Nil
- Doctoral/post doctoral fellows: Nil
- Students: Nil

**30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.****Trainings (National)****Workshops (National)****Conference**

- Shiv Dayal Singh Convener. National Seminar on 'सम्राट पृथ्वीराज चौहान ओर मध्यकालीन भारत ' 13-14 March 2015. Funded by UGC. (Rs. Lakh). Mr. Ved Pratap Vedik, Mr. Rahguvieer Singh Sirohi, Prof. Ravinder Sharma, Prof Dilip Singh, Prof. V.K. Vashistha, Prof. T.K.Mathur, Prof. G.S. Vyas, Dr. N.K. Upadhyay, Shri O.S. Lakhawat, etc. and representations from Delhi, U.P., Harayana, and Rajasthan.
- Consciousness of Alcoholism in our society. One day workshop held on 27.3.2015 in collaboration with Excise Department, Govt. Of Rajasthan.

**31. Code of ethics for research followed by the departments :****32. Student profile programme-wise:**

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.A. Economics (last 5 years)	195	79	98	19	81
M.B.A. (Bus. Eco)	80	46	35	37	63
Ph.D.		4	4		

**33. Diversity of Students**

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the state	% of students from universities outside the state	% of students from other countries
M. A. (Average of last 5 years)				Nil
M.B.A. (Bus. Eco.)				
Ph.D.				Nil

34. **How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.** 64 (16.4%) qualified National level exams (NET JRF/SLET 13, Others 38 (Appendix III)

35. **Student progression (Appendix IV)**

Student progression		Percentage against enrolled
UG to PG		Not applicable
PG to M.Phil.		2%
PG to Ph.D.		12.5%
Ph.D. to Post-Doctoral		Nil
Employed	Campus selection	Nil
	Other than campus recruitment	37.6%
Entrepreneurs		Nil

36. **Diversity of staff**

Percentage of faculty who are Graduates	
of the same university	Nil
From other universities within the state	100%
From Universities from other states	Nil
From universities outside of the country	Nil

37. **Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period:** None

38. **Present details of departmental infrastructural facilities with regard to**

- Library** 525 books, National News Papers 04; Journals
- Internet facilities for staff and students:** Not available
- Total number of class rooms:** Two classroom
- Class rooms with ICT facility:** One
- Students' laboratories:** one (One Computer Laboratory)
- Research laboratories:** Nil

39. **List of doctoral, post-doctoral students and Research Associates**

- from the host institution/university** Post Doc: Dr. Vikas Yadav under Dr. Radhakrishnan Postdoctoral fellowship in humanities and social Sciences by University grants Commission , Mentor: Dr. Shiv dayal Singh

**b) from other institutions/universities:** Nil

40. **Number of post graduate students getting financial assistance from the university:**

- Professional Faculty Fund Scholarship One each in M.A. and M.B.A. (Bus. Eco) Previous and Final Year each every year

41. **Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:**

No. But the number of applicants seeking admission in M.B.A. had declined throughout the country. Moreover pattern of entrance examinations in administrative services (UPSC and RPSC) has changed, wherein there is no subject paper now. This also has reduced importance of PG in subjects like Economics.

**42. Does the department obtain feedback from:**

- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? No
- students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? No
- alumni and employers on the programmes offered and how does the department utilize the feedback? No

**43. List the distinguished alumni of the department (maximum 10)**

Name	Address	Designation
Dr. Hemlata Manglani	Department of Economics Central University of Rajasthan, Kishangarh (Ajmer)	Assistant Professor
Dr. Anurag Asawa	Department of Economics GoKhale Institute of Politics and Economics	Assistant Professor
Dr.Surender Kumar 9460804264	Department of Economics VMOU, Kota	Assistant Professor
Ranveer Singh	Statistical and Planning Department, Jaipur	Joint Director
Anil Kumar Verma 9928378412	Reserve Bank of India, Mumbai	Research Officer, Grade B
Savtantra Kumar	Bank P.O.	Bank P.O.
Parbhudayal Jangid	Bank P.O.	Bank P.O.
Yogender	Savitri Girls Government College, Ajmer	College Lecturer
Dharm Singh Meena 9001163666	College Lecturer JBD Government Girls College, Kota	College Lecturer
Anup Atre 9829354049	Government College, Ajmer	College Lecturer

**44. Give details of student enrichment programmes (special lectures/workshops / seminar) involving external experts.**

Students of M.A., M.B.A. (Business Economics) and Ph.D. at Economics Department participated in all trainings and workshops organized in the Department that are depicted at point 30.

***Kautilya Series of Lectures After Kautilya –***

- 1.March 11, 2013 Foreign Direct Investment, Prof. Tapan Chaure, Vikram University, Ujjain
2. March 29, 2014 Prof. R.C. Sharma, Central University of Rajasthan, Bandarsindari
- 3.February 23, 2015 Socioeconomic culture of Hungary. Mr. Imre Kovach, Hungary

**45. List the teaching methods adopted by the faculty for different programmes.**

1. Smart board
2. Traditional chalk-board
3. Power point presentations
4. Student seminars to develop presentation skills
5. Library hours
6. Industrial visit in first semester and project in fourth semester.

**46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?**

Following are the Vision and Mission of the Department of Economics.

**Vision**

The Department endeavours to impart specialized knowledge in the field of Economics so as to enable the students to become agents of change in the social and economic development of the country. The Department foresees and creates platform for their active participation in the department of society

**Mission**

The department of Economics at MDS University, Ajmer aims to provide immense opportunities to the students in the sector of Economic welfare and development by including skills, analytical aptitude and scientific approach and enabling them to solve the economic and social problems of present era.

**Strategies to fulfil the vision:**

- Course curriculum and pedagogy take into consideration the vision of the Department challenging students with assignments and internal evaluation
- Developing attitude for Research

**47. Highlight the participation of students and faculty in extension activities.**

Students work for the society through the **NSS**. They are encouraged to participate in the **blood donation camps**.

**48. Give details of “beyond syllabus scholarly activities” of the department.**

- Industrial visit.
- Participation in student seminars, workshops, training etc.



**Prof. RC Sharma, Central University of Rajasthan**

- Kautilya series of lectures



**Dr. Vijayveer with students and faculty after delivering lecture**

**49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. No**

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

**Strengths :**

- **Computer lab.** The Department possesses a well-equipped computer laboratory with 20 computers along with internet facility.
- **Library cum reading room.** The Department library is enriched with 525 titles of books in Economics and a subscription of 04 reputed news papers and also employment news paper.
- **Innovative teaching facilities.** The Department of economics with a view to make teaching learning process more interesting and innovative uses various Audio-video teaching aids like LCD projector, Interactive boards etc.
- **Educational Trip/Industrial Visit.** With a view to give students a real life and practical exposure of economic activities industrial visits cum educational trips are made an integral part of curriculum.

**Opportunities**

- Recruit and retain qualified guest faculty.
- Large and increasing pool of persons interested in Economics.
- Diverse and accessible regional population.

**Weaknesses:**

- Lack of sufficient staff.
- The Department is strained to meet demand for undergraduate classes.

**Challenges**

- To get the qualified teaching faculty to teach the students
- To produce the students to meet the industry demand.
- Increase in student enrolments without increase in resources.
- To place each and every student through campus placement.

**52. Future plans of the department**

To be amongst the best 'B' Schools of the country and develop a School of Econometrics.

## Appendix I

### Guest Faculty in Economics 2015-16

1. Dr. J.C.Sharma
2. Ms.Anju Goyal
3. Ms. Ranvika Chopra
4. Mr. Abhishek Gupta
5. Ms.Priti Pandya

## Appendix II

### Publications by the Faculty

S. No	Title and Journal, volume with page nos.	ISSN/ISBN No.
1	Abhinav K. Raina, <b>Shiv Dayal Singh</b> & Naveen kumar Sharma (2012), "Empowerment, Contextual Performance and Job Satisfaction : An Empirical Assessment of Hospitality Industry in Rajasthan", <i>South Asian Journal of Tourism &amp; Heritage</i> 5 (2): 99-123	0974-5432
2	Namita S. Moyal, Gulraj Kalsi Kohli & <b>Shiv Dayal Singh</b> (2012), "Socio demographic characteristics of the elderly males 960-80 years) affects their health and nutritional status" <i>Asian Journal of Home Science</i> 7(2):556-563	0973-4732
3	<b>Shiv Dayal Singh</b> (2013), "Rising Women participation in MGNREGS : A case Study of Rajasthan." <i>The IIS University Journal of social Science</i> 2(1) : 16-26.	2319-2593
4	Shiv Prasad, <b>Shiv Dayal singh</b> & Veena Kumari (2013), "An Empirical Study of Emerging Dimensions of Tourism in India". <i>South Asian Journal of Tourism &amp; Heritage</i> 6 (1): 145-158 .	0974-5432
5	Shiv Prasad, <b>Shiv Dayal singh</b> & Veena Kumari (2013), "Balance Score Card : A way to implement strategy in turbulent times ( A case Study of R.K. Marbles)", <i>Indian Journal of Applied Research</i> 3(5): 33-35	2249-555X
6	<b>Shiv Dayal Singh</b> , Anant Phagna & Gulraj Kohli (2014),"Public Distribution System in Rajasthan", <i>International Journal of Food,Nutrition and Dietetics</i> 2(2):53-56	2322-0775

### Chapters in Books

S. No	Title with page nos. Book Title, editor & publisher	ISSN/ISBN No.
1	<b>Shiv Dayal Singh, Anant phagna</b> ( 2012), "Service Sector- The Engine of Growth" In: <i>The Impact of globalisation on Economic, Political and socio-cultural domains in india</i> Dr. Anant Bhatnagar and Dr Sudha agarwal (eds). SVVSP Shramjeevi college, Ajme .pg 80-85	8189431-40-4
2	Shashi Singha , Shiv Dayal Singh(2012),"Role of CRM in E-retailing in India" In: <i>Retailing in India only Business or Beyond</i> Prof. Barbara Cangan and Elvin T. Cangan (eds). Excel India Publisher, New Delhi	978-93-82062-96-7
3	Vijay Veer Singh , Shiv Dayal Singh (2013)," Sampling Procedure & Design", In : <i>Research Methodology : A Compendium</i> (Eds.) Tapan Choure. Aksharvinyas, Ujjain. Pg. 11-24	978-81-928133-0-1

### Appendix III

#### Students who qualified National level tests

#### NET JRF

Hemlata Mangalani	
Anurag Asawa	
Vikas Yadav	
Anil Kumar Varma	
Surendra Kumar	
Ramlakhan Meena	
Anant Phagna	
Kanika Mathur	
Anup Atre	
Kavita Makwana	
Dharam Singh Meena	
Ramkumar Rao	
Apoorva Singh	
<b>Banks</b>	
Anil Kumar Verma	Reserve Bank of India, Mumbai
Savtantra Kumar	Bank P.O.
Parbhudayal Jangid	Bank P.O.
<b>State Government</b>	
Ranveer Singh	Statistical and Planning Department, Jaipur
Yogender	Savitri Girls Government College, Ajmer
Dharm Singh Meena	College Lecturer JBD Government Girls College, Kota
Anup Atre	Government College, Ajmer
Kavita Makwana	Government College
Rakesh Moriya	Planning and Evaluation Officer, Ajmer
Shambhu Sen	Government of Rajasthan
Ratan Kumar	Government of Rajasthan
Kishor Kumar	Government of Rajasthan
Anant Kumar Phagna	Government of Rajasthan
Ashok Meena	Government of Rajasthan
Rajkumar Dewwarth	Government of Rajasthan

Kamal Singh Meena	Statistical Department, Rajasthan
Murlidhar	Statistical Department, Rajasthan

#### Central School

Rajesh Bansiwala	Government of India
Renuka Chudhary	Government of India
Vijay Sharma	Government of India
Yogender	Government of India
Imran Khan	Tibetan School, Government of India
Jagdish Prasad	Government of India
Ramlakhan Meena	Government of Rajasthan
Gorav	Government of Rajasthan
Ramkumar Rao	Government of Rajasthan
Ajit Kumar	Government of Rajasthan
Vinod Meena	Government of Rajasthan
Rajesh Meena	Government of Rajasthan
Krishan Kumar Yadav	Government of India
Umesh Sharma	Government of Rajasthan
Sheduram	Census of India Department
Narender Kumar Bhamu	Government of Rajasthan
Ramkishor	Government of Rajasthan
Rakhi Agarwal	Government of Rajasthan
Lt. Co.G.L. Swarnkar	Army-Jodhpur
Mitendra Bansal	IDBI Bank, Bikaner

**Appendix IV  
ALUMNI PROFILE  
(2009 onwards)**

<b>Name</b>	<b>organization</b>	<b>Designation</b>
<b>Dr. Hemlata Manglani</b>	Department of Economics Central University of Rajasthan, Kishangarh (Ajmer)	Assistant Professor
<b>Dr. Anurag Asawa</b>	Department of Economics Gokhale Institute of Politics and Economics	Assistant Professor
<b>Dr. Vikas Yadav</b>	University Grant Commission Department of Economics Maharshi Dayanand Saraswati University, Ajmer	Dr. S. Radhakrishnan Post Doctoral Fellow
<b>Dr. Surender Kumar</b>	Department of Economics VMOU, Kota	Assistant Professor
<b>Ranveer Singh</b>	Statistical and Planning Department, Jaipur	Joint Director
<b>Anil Kumar Verma</b>	Reserve Bank of India, Mumbai	Research Officer, Grade B
<b>Savtantra Kumar</b>	Bank P.O.	Bank P.O.
<b>Parbhudayal Jangid</b>	Bank P.O.	Bank P.O.
<b>Yogender</b>	Savitri Girls Government College, Ajmer	College Lecturer
<b>Dharm Singh Meena</b>	College Lecturer JBD Government Girls College, Kota	College Lecturer
<b>Anup Atre</b>	Government College, Ajmer	College Lecturer
<b>Kavita Makwana</b>	Government College	College Lecturer
<b>Rakesh Moriya</b>	Planning and Evaluation Officer, Ajmer	Planning and Evaluation Officer
<b>Shambhu Sen</b>	Government of Rajasthan	School Lecturer
<b>Ratan Kumar</b>	Government of Rajasthan	School Lecturer
<b>Kishor Kumar</b>	Government of Rajasthan	School Lecturer
<b>Anant Kumar Phagna</b>	Government of Rajasthan	School Lecturer
<b>Ashok Meena</b>	Government of Rajasthan	School Lecturer
<b>Rajkumar Devwarth</b>	Government of Rajasthan	School Lecturer
<b>Rajesh Bansiwali</b>	Government of India	Lecturer, KVS
<b>Renuka Chudhary</b>	Government of India	Lecturer, KVS
<b>Vijay Sharma</b>	Government of India	Lecturer, KVS
<b>Yogender</b>	Government of India	Lecturer, KVS
<b>Imran Khan</b>	Tibetan School, Government of India	Lecturer
<b>Jagdish Prasad</b>	Government of India	Teacher
<b>Ramlakhan Meena</b>	Government of Rajasthan	Statistical Officer
<b>Gorav</b>	Government of Rajasthan	Statistical Officer
<b>Ramkumar Rao</b>	Government of Rajasthan	Statistical Officer
<b>Ajit Kumar</b>	Government of Rajasthan	Statistical Officer
<b>Vinod Meena</b>	Government of Rajasthan	Statistical Officer
<b>Rajesh Meena</b>	Government of Rajasthan	Statistical Officer
<b>Krishan Kumar Yadav</b>	Government of India	C.O., CRPF
<b>Umesh Sharma</b>	Government of Rajasthan	Agriculture Marketing Officer

<b>Sheduram</b>	Censes of India Department	Investigator
<b>Narender Kumar Bhamu</b>	Government of Rajasthan	Teacher
<b>Ramkishor</b>	Government of Rajasthan	Teacher
<b>Rakhi Agarwal</b>	Government of Rajasthan	Patwari
<b>Kamal Singh Meena</b>	Statistical Department, Rajasthan	Sangnak
<b>Murlidhar</b>	Statistical Department, Rajasthan	Sangnak

**Alumni (Before 2009)**

Abhishek Jaiswal	Shakti Stone Crusher, Ajmer	Entrepreneur
Ajay Sharma	K.D. Jain School, Kishangarh	Teacher
Asit Jain	GE Country Wide, Mumbai	Manager Collection
Gopal Balani	Swami Dry Cleaners, Ajmer	Entrepreneur
Hitendra Chowdhary	Hindustan Lever Ltd. Ludhiana	Sales In Charge
Lt. Co.G.L. Swarnkar	Army-Jodhpur	Colonel
Mayank Bhatnagar	Birla Group, Delhi	
Mitendra Bansal	IDBI Bank, Bikaner	Unit Manager
Mukti Govil	Citi Financial, Ajmer	P.L. Officer
Naveen Kumar Chhiber	Dashmesh Infrastructure Pvt. Ltd., Ranchi	Marketing Manager
Neeraj Mathur	ICICI Prudential, Ajmer	Sr. Manager
Nidhi Sharma		Teacher
Ritesh Chauhan	GE Consumer Finance, A'bad	
Rohit Chandela	Zee T.V. , Surat	Sr. Sales Executive
Sanjay Choudhary	Birla Global Asset Finance Co Ltd., Jaipur	Asst. manager
Sanjay Sharma	Z- Laboratories Ltd., Udaipur	Area Business manager
Yadunandan Jaluka	Supreme Industries Ltd., Delhi	Asst. Marketing Manager
Surya Prakash Shukla	Studds helmet Co. , Ghaziabad	Area Sales Manager
Sheetal Lohiya	Spring Field Shool, Jaipur	Economics (Lect)
Anjum Ali Panwar	Standard Chartered Bank, Delhi	Sr. Sales Associate
Aruna Goyal	Bharti Infocom	
Sandeep Gupta	Rainbow, Kishangarh	Sales Executive
Mohd. Suhel Zama	ICICI, Ajmer	Direct Sales agent
Pukhraj Sharma	Vidyut Mettali Pvt. Ltd. , Sikar & Jhunjhunu	Area Sales Manager
Amit Chowdhary	Marble Supplier, Kishangarh	Entrepreneur
Brij Mohan Soni	A.R. Stone, Kolhapur	Entrepreneur
Ashok Kr. Gagrani	Sundaram Finance Distribution Ltd.,Bhilwara	Sales Executive
Rajesh Yadav	IOC Petrol Pump, Jaipur	Entrepreneur
Sandeep Ajmera	Wipro , BPO Ltd. , New Delhi	Team Leader
Tarun Agarwal	HDFC Bnk, Jaipur	Officer
Jainendra Chaturvedi	Media Agency , Ajmer	Entrepreneur
Umesh Sharma	Marble Supplier	Entrepreneur
Pranav Bhatnagar	Savi Aquatech Pvt. Ltd., Delhi	Channel Manager
Jainendra Kr. Jain	Marble Supplier, Kishangarh	Entrepreneur
Pawan Kr. Anand	Study Hours School	Director
Sanjay Kumar Verma	Blue cross, jaipur	Marketing Representative
Shrikant Tilak Joshi	Shyam telecom, Ajmer	Regional Manager
Mahavir Prasad Yadav	ICICI - Lombard, jaipur	Executive
Laxmi Narayan Mathuri	Panjon Ltd., Jaipur	Territory Sales Officer
Satpal Yadav	Business World Magazine, Jaipur	Sales Executive
Sriram Ranawat	Citi Financial, Delhi	Sr. Sales Executive

Amit Kumar Garg	Centurian Bank, jaipur	Officer
Amit Sharma	Nicolas pharmaceuticals Pvt. Ltd., Ajmer	Territory Business Manager
Anil Kumar Verma	HDFC Home Loan, Bhiwadi	Sales Officer
daisy Simlote	Hutch, Ajmer	Office Executive
Disha mehta	Citi Financial, Ajmer	Personal Loan Officer
Kanupriya Saxena	HDFC Bank, Ajmer	Branch Dedicated Resource
Megha Mukherjee	HDFC Bank, Jaipur	Quality Control Incharge
Pankaj Kr. Verma	HDFC Bank, Ajmer	Key Resource Customer Relation
Pankaj Yadav	Preliance Infocom, Ludhiana	City Lead(PPPCO)-Head
Preeti Rathore	IDBI Bank, Kishangarh	Operations
Ranjan Bhargava	India Bulls Securities Ltd. , Ajmer	Relationship Manager
Rajendra Singh Rathore	HDFC Bank, ajmer	Key Resource Customer Relation
Ranu Agarwal	Professional Group, Jaipur	Branch Manager
Sheetal Jhanwar	Win Care Pharmaceuticals, Ajmer	Sales Manager
Abhishek Jaiswal	Shakti Stone Crusher, Ajmer	Entrepreneur
Ajay Sharma	K.D. Jain School, Kishangarh	Teacher
Asit Jain	GE Country Wide, Mumbai	Manager Collection
Gopal Balani	Swami Dry Cleaners, Ajmer	Entrepreneur
Hitendra Chowdhary	Hindustan Lever Ltd. Ludhiana	Sales In Charge
Lt. Co.G.L. Swarnkar	Army-Jodhpur	Colonel
Mayank Bhatnagar	Birla Group, Delhi	
Mitendra Bansal	IDBI Bank, Bikaner	Unit Manager
Mukti Govil	Citi Financial, Ajmer	P.L. Officer
Naveen Kumar Chhiber	Dashmesh Infrastructure Pvt. Ltd., Ranchi	Marketing Manager
Neeraj Mathur	ICICI Prudential, Ajmer	Sr. Manager
Nidhi Sharma		Teacher
Ritesh Chauhan	GE Consumer Finance, A'bad	
Rohit Chandela	Zee T.V. , Surat	Sr. Sales Executive
Sanjay Choudhary	Birla Global Asset Finance Co Ltd., Jaipur	Asst. manager
Sanjay Sharma	Z- Laboratories Ltd., Udaipur	Area Business manager
Yadunandan Jaluka	Supreme Industries Ltd., Delhi	Asst. Marketing Manager
Surya Prakash Shukla	Studds helmet Co. , Ghaziabad	Area Sales Manager
Sheetal Lohiya	Spring Field Shool, Jaipur	Economics (Lect)
Anjum Ali Panwar	Standard Chartered Bank, Delhi	Sr. Sales Associate
Aruna Goyal	Bharti Infocom	
Sandeep Gupta	Rainbow, Kishangarh	Sales Executive
Mohd. Suhel Zama	ICICI, Ajmer	Direct Sales agent
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Amit Chowdhary	Marble Supplier, Kishangarh	Entrepreneur
Brij Mohan Soni	A.R. Stone, Kolhapur	Entrepreneur
Ashok Kr. Gagrani	Sundaram Finance Distribution	Sales Executive

	Ltd.,Bhilwara	
Rajesh Yadav	IOC Petrol Pump, Jaipur	Entrepreneur
Sandeep Ajmera	Wipro , BPO Ltd. , New Delhi	Team Leader
Tarun Agarwal	HDFC Bnk, Jaipur	Officer
Jainendra Chaturvedi	Media Agency , Ajmer	Entrepreneur
Umesh Sharma	Marble Supplier	Entrepreneur
Pranav Bhatnagar	Savi Aquatech Pvt. Ltd., Delhi	Channel Manager
Jainendra Kr. Jain	Marble Supplier, Kishangarh	Entrepreneur
Pawan Kr. Anand	Study Hours School	Director
Sanjay Kumar Verma	Blue cross, jaipur	Marketing Representative
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Amit Sharma	Nicolas pharmaceuticals Pvt. Ltd., Ajmer	Territory Business Manager
Anil Kumar Verma	HDFC Home Loan, Bhiwadi	Sales Officer
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Disha mehta	Citi Financial, Ajmer	Personal Loan Officer
Kanupriya Saxena	HDFC Bank, Ajmer	Branch Dedicated Resource
Megha Mukherjee	HDFC Bank, Jaipur	Quality Control Incharge
Pankaj Kr. Verma	HDFC Bank, Ajmer	Key Resource Customer Relation
Pankaj Yadav	Preliance Infocom, Ludhiana	City Lead(PPPCO)-Head
Preeti Rathore	IDBI Bank, Kishangarh	Operations
Ranjan Bhargava	India Bulls Securities Ltd. , Ajmer	Relationship Manager
Rajendra Singh Rathore	HDFC Bank, ajmer	Key Resource Customer Relation
Ranu Agarwal	Professional Group, Jaipur	Branch Manager
Sheetal Jhanwar	Win Care Pharmaceuticals, Ajmer	Sales Manager

इतिहास

विभाग

DEPARTMENT  
OF  
HISTORY

1. Name of the Department : History
2. Year of establishment : 1990
3. Is the Department part of a School/Faculty of the university?
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
5. Interdisciplinary programmes and departments involved : NO
6. Courses in collaboration with other universities, industries, foreign institutions, etc. :NO
7. Details of programmes discontinued, if any, with reasons
8. Examination System: Annual : NO
9. Participation of the department in the courses offered by other departments
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Designation	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	01	Nil	
Associate Professor	02	Nil	
Assistant Professor	Nil	Nil	
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance : No Permanent Faculty

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D.
Prof. G.S. Vyas	M.A., Ph.D.	Retd. Professor & Head on contract assignment	Ancient History	45 Years	25 awarded, 2 registered

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors -
13. Percentage of classes taken by temporary faculty – programme-wise information : 100%
14. Programme-wise Student Teacher Ratio : M.A. 6:1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual : 1 clerical staff
16. Research thrust areas as recognized by major funding agencies -
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and

grants received project-wise. NIL

18. Inter-institutional collaborative projects and associated grants received : NIL
  - a) National collaboration
  - b) International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : NIL
20. Research facility/centre with : M.Phil & Ph.D.
  - state recognition
  - national recognition
21. Special research laboratories sponsored by/created by industry or corporate bodies : N.A.
22. Publications:
  - \* Number of papers published in peer reviewed journals (national / international) 02
  - \* Monographs
  - \* Chapters in Books
  - \* Edited Books 01
  - \* Books with ISBN with details of publishers
  - \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
  - \* Citation Index – range / average
  - \* SNIP
  - \* SJR
  - \* Impact Factor – range / average
  - \* h-index
23. Details of patents and income generated : N.A.
24. Areas of consultancy and income generated : N.A.
25. Faculty selected nationally/internationally to visit other laboratories/institutions /industries in India and abroad : NIL
26. Faculty serving in
  - a) National committees
  - b) International committees
  - c) Editorial Boards
  - d) any other (please specify) : NIL
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).  
UGC ASC Refresher Courses
28. Student projects
  - percentage of students who have done in-house projects including inter-departmental projects : NIL
  - percentage of students doing projects in collaboration with other universities/industry /institute : NIL

29. Awards/recognitions received at the national and international level by
- Faculty : NIL
  - Doctoral/post doctoral fellows : NIL
  - Students : NIL
30. Seminars/Conferences/Workshops organized and the source of funding (national /international) with details of outstanding participants, if any.  
One National Seminar was organised in Yr. 2014-15 on "Prithviraj Chauhan and His times"



31. Code of ethics for research followed by the departments
32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.A. History 2012-13	30	20	-	100%	-
M.A. History 2013-14	45	18	-	100%	-
M.A. History 2014-15	46	34	05	92%	100%
M.A. History 2015-16	70	33	16	Exam yet to be held	

33. Diversity of students
34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.  
RAS-2, NET-05
35. Student progression

Student progression	Percentage against enrolled
UG to PG	-
PG to M.Phil.	-05
PG to Ph.D.	-04
Ph.D. to Post-Doctoral	-
Employed	-
<input type="checkbox"/> Campus selection	
<input type="checkbox"/> Other than campus recruitment	
Entrepreneurs	-

36. Diversity of staff: No permanent teaching staff
37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : No Permanent Faculty
38. Present details of departmental infrastructural facilities with regard to
  - a) Library : Departmental Library
  - b) Internet facilities for staff and students -
  - c) Total number of class rooms : 2
  - d) Class rooms with ICT facility : Black board teaching
  - d) Students' laboratories : N.A.
  - e) Research laboratories : N.A.
39. List of doctoral, post-doctoral students and Research Associates
  - a) from the host institution/university
  - b) from other institutions/universities
40. Number of post graduate students getting financial assistance from the university.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
42. Does the department obtain feedback from : No Permanent Faculty
  - a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10)
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts : Seminars
45. List the teaching methods adopted by the faculty for different programmes.  
Lectures, Seminars
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? : Lectures & Seminars
47. Highlight the participation of students and faculty in extension activities :  
Seminars & Paper presentation by students
48. Give details of "beyond syllabus scholarly activities" of the department.



**Mr. Emre Kovach on Ancient India's civilizational links**

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
52. Future plans of the department.

राजनीति विज्ञान

विभाग

Department  
of

Political Science

1. Name of the Department – Department of Political Science
2. Year of establishment - 1990-91
3. Is the Department part of a School/Faculty of the university? - Yes
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) – M.A., M. Phil., Ph.D.
5. Interdisciplinary programmes and departments involved --Nil
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
7. Details of programmes discontinued, if any, with reasons – None
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System – Annual system
9. Participation of the department in the courses offered by other departments: No
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Sanctioned	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	01	Nil	Nil
Associate Professor	02	Nil	Nil
Asstt. Professor	Nil		
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance: No permanent faculty

Name	Qualification	Designation	Specialization	No. of years of experience	M.Phil. / Ph.D. guided in last 4 years
<b>Dr. S.N. Singh</b>	M.A. Ph.D.	Professor (Promoted under CAS on 9.3.1990)	Caste, Class and Politics	25 years 3 months	Ph. D. 22 (2012) M. Phil. 37 (2010)

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors –
13. Percentage of classes taken by temporary faculty – programme-wise information – Nil
14. Programme-wise Student Teacher Ratio - M.A. 6:1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual – One
16. Research thrust areas as recognized by major funding agencies –



29. Awards / recognitions received at the national and international level by
- Faculty
  - Doctoral / post doctoral fellows
  - Students
30. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any. Organized 03 National Seminars



**Samvidhan Divas Seminar**

31. Code of ethics for research followed by the departments
32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.A. (P)	127	69	44	100%	100%
M.A. (F)	47	26	19	100%	100%
M. Phil. (2012-13)	07	5	2	100%	100%
Admissions 2013-14	11	8	3	Awaited	

M.Phil. 18, 13, 5

33. Diversity of students (2012-16)

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.A. (P)	92	35	01	-
M.A. (F)	47	-	-	-
M.Phil.	12	05	-	-

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. NET: 02

35. Student progression

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
□ Campus selection	
□ Other than campus recruitment	
Entrepreneurs	

36. Diversity of staff

Percentage of faculty who are graduates
of the same university
from other universities within the State
from universities from other States
From universities outside the country

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period  
No permanent faculty

38. Present details of departmental infrastructural facilities with regard to

- Library – Yes
- Internet facilities for staff and students
- Total number of class rooms - 02
- Class rooms with ICT facility – not available
- Students' laboratories – NA
- Research laboratories– NA

39. List of doctoral, post-doctoral students and Research Associates

- from the host institution/university
- from other institutions/universities

40. Number of post graduate students getting financial assistance from the university. -
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
42. Does the department obtain feedback from - No permanent faculty
  - a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10) – inf. not compiled
44. Give details of student enrichment programmes (special lectures / workshops /seminar) involving external experts. Seminars
45. List the teaching methods adopted by the faculty for different programmes.: Lectures, Seminars
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? : Lectures, Seminars
47. Highlight the participation of students and faculty in extension activities. Seminars and paper presentation by students
48. Give details of “beyond syllabus scholarly activities” of the department.
48. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. – as of the university
49. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
50. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
51. Future plans of the department.

जनसंख्या  
अध्ययन  
विभाग

DEPARTMENT  
OF  
POPULATION  
STUDIES

1. Name of the Department : POPULATION STUDIES
2. Year of establishment : 1995
3. Is the Department part of a School/Faculty of the university? Yes
4. Names of programmes offered (PG, Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
5. Interdisciplinary programmes and departments involved : The department is itself interdisciplinary department
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : NIL
7. Details of programmes discontinued, if any, with reasons : NIL
8. Examination System: Semester
9. Participation of the department in the courses offered by other departments : NIL
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Designation	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	Related to establishment section	01	01
Associate Professor		Nil	
Assistant Professor		Nil	
Others			

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D.
Prof. Laxmi Thakur	MA, Ph.D.	Head	Population Studies, Psychology & Social Welfare	28 years	02

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors
13. Percentage of classes taken by temporary faculty – programme-wise information
14. Programme-wise Student Teacher Ratio
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual
16. Research thrust areas as recognized by major funding agencies
17. Number of faculty with ongoing projects from a) national b) international funding



- Faculty : Best Paper Award in an Int. Conf. at SRM University, Chennai
- Doctoral/post doctoral fellows
- Students

31. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

32. Code of ethics for research followed by the departments

33. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MPS	67	32	10	Result awaited	Result awaited
MSW	19	05	03	Result awaited	Result awaited

34. Diversity of students

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MPS	64%	36%		
MSW	73%	27%		

35. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

36. Student progression

Student progression	Percentage against enrolled
UG to PG	100%
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
<input type="checkbox"/> Campus selection	
<input type="checkbox"/> Other than campus recruitment	
Entrepreneurs	

37. Diversity of staff

Percentage of faculty who are graduates of the same university	
From other universities within the State	100%
From universities from other States	
from Universities outside the country	

38. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : NIL

39. Present details of departmental infrastructural facilities with regard to

- a. Library : YES
  - b. Internet facilities for staff and students : YES
  - c. Total number of class rooms : 04
  - d. Class rooms with ICT facility
  - e. Students' laboratories : No
  - f. Research laboratories : No
39. List of doctoral, post-doctoral students and Research Associates: 4 students completed doctoral degree from the department
- a) from the host institution/university
  - b) from other institutions/universities
40. Number of post graduate students getting financial assistance from the university. NO
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
42. Does the department obtain feedback from
- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? : YES
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10) : Annex-III
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.
45. List the teaching methods adopted by the faculty for different programmes.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
47. Highlight the participation of students and faculty in extension activities.
48. Give details of "beyond syllabus scholarly activities" of the department.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
52. Future plans of the department. :

When teaching faculty and typist will be given in the department then only one can think about future plan.

# FACULTY OF VEDIC STUDIES

YOGIC SCIENCE & HUMAN  
CONCIOUSNESS



MAHARSHI DAYANAND SARASWATI  
UNIVERSITY

AJMER

योग विज्ञान  
एवं

मानव चेतना

विभाग

DEPARTMENT  
OF  
YOGIC SCIENCE  
&  
HUMAN  
CONSCIOUSNESS

1. Name of the Department: *Yogic science & Human Consciousness*
2. Year of Establishment: *1997*
3. Is the department part of a school/Faculty of the university: *Yes {School of Vedic science}*
4. Names of programmes offered (UG, PG, M. Phil., Ph.D., Integrated masters; Integrated Ph.D., D.Sc., D.Litt., etc.) :  
*UG-B.Sc. {Naturopathy & Yogic Science}, YICC {Yoga Instructor Certificate Course}  
PG- Master in Yoga Studies & Therapy Management, DYEHS {Diploma in Yoga Education & Human Science}*
5. Inter-disciplinary program and departments involved: *No*
6. Courses in collaboration with the universities, industries, foreign institutions, etc. : *No*
7. Details of programmes discontinued, if any, with reasons: *No*
8. Examination system: Annual/ Semester/ trimester/ choice based credit system: - *Annual & Semester*
9. Participation of the department in the courses offered by the other department: *No*
10. Number of teaching posts sanctioned, filled and actual (Professors/ Associate Professors/ Asst. Professors/ Others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	Nil	Nil	Nil
Associate professors	Nil	Nil	Nil
Asst. professors	Nil	Nil	Nil
Others	Contract-2	-	-

11. Faculty profile with name, Qualification, Designation, area of Specialization, Experience and Research under guidance

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D./ M. Phil. students guided for the last 4 years
Jayanti Devi	Ph.D., M.A., M.Sc., PGDYN, YTIC, YICC	In- charge of the Dept. of Yogic Science	Yoga Therapy and Psychology.	15 Years.	Nil
Dr. Lara Sharma	Ph.D. M.A. M.Sc. DYEHS, YICC	Yoga Ins.	Yoga {Therapy & Philosophy	12 Years	Nil

12. List of senior visiting fellows, adjunct faculty, emeritus professors: - *Nil*

13. Percentage of classes taken by temporary faculty- program-wise information:  
*UG-B.Sc. {Naturopathy & Yogic Science}, = 15*  
*YICC {Yoga Instructor Certificate Course} = 1*  
*PG- Master in Yoga Studies & Therapy Management = 4*  
*DYEHS {Diploma in Yoga Education & Human Science} = 2*
14. Programme-wise student teacher Ratio  
*UG-B.Sc. {Naturopathy & Yogic Science}, = 20: 1*  
*YICC {Yoga Instructor Certificate Course} = 20: 1*  
*PG- Master in Yoga Studies & Therapy Management = 20: 1*  
*DYEHS {Diploma in Yoga Education & Human Science} = 20: 1*
15. Number of academic sport staff (technical) and administrative staff: sanctioned, filled and actual: *-Nil*
16. Research thrust areas and recognized by major funding agencies: *-Nil*
17. Number of faculty ongoing projects from a) national b) international founding agencies and c) total grants received. Give the name of the founding agencies, project title and grants received project-wise. *:-Nil*
18. Inter-institutional collaborative project and associated grants received  
a) National collaboration *:-Nil* b) International collaboration *:-Nil*
19. Departmental projects founded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc. ; total grants received *:-Nil*
20. Research faculty/ centre with
  - o State recognition *:-Nil*
  - o National recognition *:- Nil*
  - o International recognition: *Nil*
21. Special research laboratories sponsored by / created by industry or corporate bodies *:- Nil*
22. Publications:
  - Number of papers published in peer reviewed journals (national/international) *:-Nil*
  - Monographs *:-Nil*
  - Chapters in books *:-Nil*
  - Edited books *:-Nil*
  - Books with ISBN with details of publishers *:-Nil*
  - Number listed in international database ( For e.g. Web of science, scopes, Humanities International Complete, Dare Database- International Social Science Directory , EBSCO host, etc.) *:-Nil*
  - Citation Index- range/ average *:-Nil*
  - SNIP *:-Nil*
  - SJR *:-Nil*
  - Impact Factor- range/ average *:-Nil*

- H-index :-*Nil*
23. Details of parents and income generated :-*Nil*
24. Areas of consultancy and income generated :-*Nil*
25. faculty selected nationally/ internationally to visit other laboratories/ institutions /industries in India and abroad :-*Nil*
26. faculty serving in  
a) National communities b) International committees c) Editorial Boards d) any other (please specify) :-*Nil*
27. faculty researching strategies (UGC, ASC, Refresher/ orientation programmes, workshop, training programmes and similar programmes). :-*Nil*
28. Student projects
- Percentage of students who have done in-house projects including inter-departmental projects :-*Nil*
  - Percentage of students doing projects in collaboration with other universities/ industry/ institute :-*Nil*
29. Awards/ recognitions received at the national and international level by
- Faculty :-*Nil*
  - Doctoral/ post doctoral fellows :-*Nil*
  - Students :-*Nil*
30. Seminars/ Conferences/ Workshops Organized and the source of founding (national/ international) with details of outstanding participants, if any. :-*Nil*
31. Code of ethics for research followed by the departments :-*Nil*
32. Student profile programme-wise

Name of the Programme (refer to question no. 4)	Application received	Selected		Pass percentage	
		Male	female	male	female
Master in Yoga Studies {Sem.-I}	25	11	10	Exam. due	Exam. Due
Master in Yoga Studies{Sem.-III}	20	14	4	Exam.due	Exam.due
B.Sc. Pt.I	24	14	6	Exam.due	Exam.due
B.Sc. Pt. II	13	9	4	Exam.due	Exam.due
B.Sc. Pt.III	6	4	2	Exam.due	Exam.due
DYEHS	70	14	7	Exam. Due	Exam.due
YICC	27	8	10	Exam.due	Exam.due

## 33. Diversity of students

Name of the programme (refer to question no. 4)	% of students from the same universities	% of the students from other universities within the state	% of students from universities outside the state	% of students from countries
Master in Yoga Studies {Sem.-I}	99%			1%
Master in Yoga Studies {Sem.-III}	100%			
B.Sc. Pt.I	90% {Same Board} 10% other Board			
B.Sc. Pt. II	100%			
B.Sc. Pt.III	100%			
DYEHS	90%	10%		
YICC	90% {Same Board} 10% other Board			

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category- wise. Dept. have not data.

## 35. Student progression

Student progression	Percentage against enrolled
UG to PG	100%
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	
o Campus selection	Nil
o Other than campus recruitment	5%
Entrepreneurs	10%

## 36. Diversity of staff

Percentage of faculty who are graduates	
Of the same university	Nil
From other universities within the State	Nil
From universities from other States from	Nil
Universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period :- Nil

38. Present details of departmental infrastructural facilities with regard to

- Library :- Yes {a small Library with 500 books}
- Internet facilities for staff and students :- No
- Total number of class rooms :-05

d) Class rooms with ICT facility:- *No*

e) Students laboratories:-*No*

f) Research laboratories:-*No*

39. List of doctoral, post doctoral students and Research Associates

a) From the host institution / universities: - *Nil*

b) From other institution/ universities:-*Nil*

38. Number of post graduate students getting financial assistance from the university. :- *No*

39. Was any need assessment exercise undertaken before the development of new Programme (s)? If so, highlight the methodology

40. Does the department obtains feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback

c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

41. List the distinguished alumni of the department (maximum 10)

42. Give details of Students enrichment programmes (special lecture/workshops/ seminar) involving external experts

43. List the teaching method adopted by the faculty for different programmes

44. How does the department insure that programme objective are constantly meet and learning outcomes are monitored?

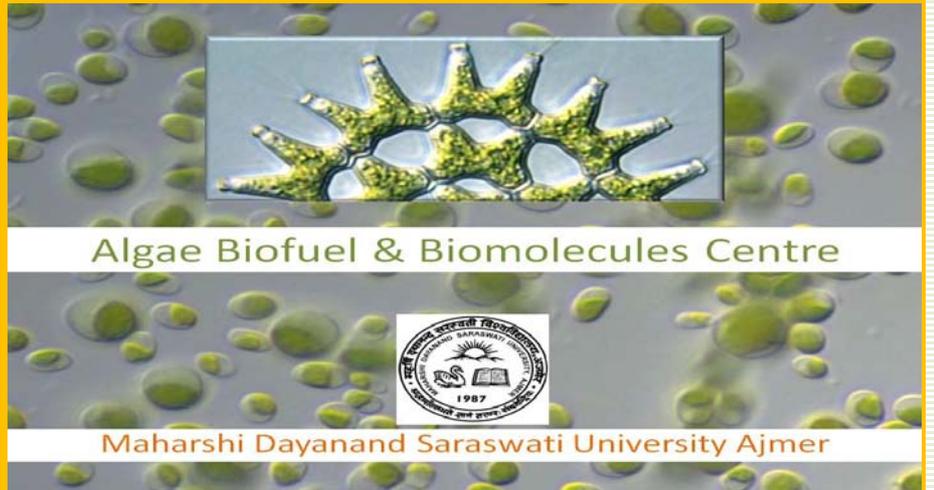
45. Highlight the participants of students and faculty in extension activities.

# INPUTS FROM THE CENTRES



**MAHARSHI DAYANAND SARASWATI  
UNIVERSITY  
AJMER**

# शैवाल जैव ईंधन एवं जैव अणु केंद्र



**ALGAE BIOFUEL  
&  
BIOMOLECULES  
CENTRE**

1. **Name of the Centre :** Algae Biofuel & Biomolecules Centre
2. **Year of establishment :** 2011
3. **Is the Centre part of a School/Faculty of the university?** Faculty of Science
4. **Interdisciplinary program and departments involved:** Research Activities with following current (being carried out without financial support from the University) and future research programs of the investigators of the collaborating departments:

Investigator	Current and future activities
<b>Department of Microbiology</b>	
<b>Dr. Ashish Bhatnagar</b>	Algae Biodiversity, Biofuel, Mass Cultivation and Harvesting
<b>Dr. Monica Bhatnagar</b>	Spent Biomass Utilization, Nutrient mobilization from wastes for algae cultivation, Algae based Microbial Fuel Cells, Microbial biodiversity, Induction of Lipid/ storage molecule accumulation
<b>Department Food Science &amp; Nutrition</b>	
<b>Dr. Bharti Jain</b>	Animal Feed and Food supplements Nutritional value of algal material
<b>Dr. Ritu Mathur</b>	Nutritional and growth factors, Toxicity and toxic elements in algal biomass
<b>Department of Environmental Science</b>	
<b>Dr. Praveen Mathur</b>	Waste remediation and Technology demonstration through development of Energy Park, EIA, LCA
<b>Dr. Subroto Dutta</b>	Fate of Heavy metals in algae cultivation and application in biofuels
<b>Department of Economics</b>	
<b>Dr. Shiv Dayal Singh</b>	Socioeconomics and Venture capitalism in algae
<b>Department of Management and Centre for ESBM</b>	
<b>Dr. Ashish Pareek</b>	IPR on biofuel production in India
<b>Dr. Deepika Upadhyaya</b>	Global Venture capital in biofuel industry and its role in India

5. **Courses in collaboration with other universities, industries, foreign institutions, etc.** NA please see point 4
6. **Details of programs discontinued, if any, with reasons** NA
7. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**  
NA please see point 4
8. **Participation of the department in the courses offered by other departments** NA  
please see point 4
9. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)** Nil Please see point 4
10. **Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:** Faculty profiles are already there in the parent departments
12. **List of senior Visiting Fellows, adjunct faculty, emeritus professors:**  
**Adjunct Faculty:**

Investigator	Current and future activities
Department of Chemistry, Government College, Ajmer	
<b>Dr. Arun Pareek</b>	Lipid extraction and biodiesel conversion, Biodiesel quality, Biopolymer applications
Department of Chemistry, Bengal University of Engineering & Science, Kolkata	
<b>Dr. Jhuma Ganguly</b>	Structural characterization of biological macromolecules

13. **Percentage of classes taken by temporary faculty – programme-wise information**  
NA please see point 4
14. **Program-wise Student Teacher Ratio** NA please see point 4
15. **Number of academic support staff (technical) and administrative staff:** sanctioned, filled and actual : Nil
16. **Research thrust areas as recognized by major funding agencies :** Biodiversity of lipid/starch/glycogen accumulating Microalgae and Cyanobacteria, Biofuel and Bioprospecting especially for biopolymers and their applications
17. **Number of faculty with ongoing projects from a) National funding agencies, b) International funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.** Nil at present

**a) National Funding Agency**

**Project proposal submitted (National)**

1. UGC MRP: Prospecting community wastewater tolerant, mixotrophic, oleogenic algae in Rajasthan for Biodiesel Production and Wastewater remediation: Ashish Bhatnagar (Rs. 25.7 lakh) submitted on 30.9.2014. No response
2. Ashish Bhatnagar, Monica Bhatnagar, Pavan Dadheech 28.2.15 **Feasible Mass Cultivation of Algae as Biofuel Feedstock in Rajasthan (Interventions: Nutrient Supply, Water demand and spent biomass utilization)** (Rs. 98.75 lakh) to DBT, GOI under Call for Proposals for Challenge Program on Algal biomass production for cost effective biofuel. Presentation made on 11.12.15 at Delhi and revised proposal asked to be submitted by the end of January 2016.

**b) International funding agency : Nil**

**18. Inter-institutional collaborative projects and associated grants received**

Academic collaborations exist with

1. Prof. D.W. Dhar and Dr. S. Pabbi, Microbiology Division, IARI, New Delhi
2. Dr. M. Krishnamohan, Biotechnology Division, Birla Institute for Scientific Research, Jaipur for studies and conservation of algal and cyanobacterial diversity of Rajasthan, a joint project has been submitted to DST Rajasthan.
3. Dr. Susmita Dutta Department of Chemical Engineering, National Institute of Technology, Durgapur, Mahatma Gandhi Avenue, Durgapur on biosorbent preparation for wastewater remediation from used algal biomass
4. Dr. Jhuma Ganguly Department of Chemistry, Bengal Engineering and Science University, Shibpur, Howrah, WB, India for Structural analysis of the exopolysaccharides
5. Senthil Chinnasamy of Aban Infrastructure Ltd. Chennai and Dr. B. Ramakrishnan Microbiology Division for various aspects of algae cultivation
6. Dr. Pavan Dadheech Department of Microbiology, Central University of Rajasthan, Bandarsindari on Feasible Mass Cultivation of Algae as Biofuel Feedstock in Rajasthan (Interventions: Nutrient Supply, Water demand and spent biomass utilization) [BT/PR13275/PBD/26/464/2015]

**b) International collaboration**

Academic collaborations exist with

1. Prof. KC Das Biorefining and Carbon Cycling Program of the University of Georgia, Athens USA for reactor design improvement as well as for the development of technologies

towards cost reduction. Partnership is envisaged on thermoliquefaction, pyrolysis and gasification of algae biomass.

19. **Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE, DBT, ICSSR, AICTE, etc.; total grants received.** Nil

20. **Research facility/centre with University recognition:** None

21. **Special research laboratories sponsored by/created by industry or corporate bodies** NA

22. **Publications:**

\* **Number of papers** published in peer reviewed journals (national/ international) 5 (Appendix I): 5 International

\* **Number of publications with ISI Journal impact Factor (Thompson Reuter)**  
4 International

\* **Chapters in Books** 1 (Appendix I): 1 International

* <b>Citation Index –</b>	range/average
* <b>SNIP</b>	Not known
* <b>SJR</b>	<b>0.12-3.15/1.344</b>
* <b>Impact Factor</b>	<b>0-5.613/2.961</b>
* <b>H-index</b>	<b>5-110/64.2</b>

23. **Details of patents and income generated:** None

24. **Areas of consultancy and income generated:**

**Proposed Project (International)**

"An Integrated Water Resource Management Approach for a Better Understanding of Climatic and Anthropogenic Hydrologic Fluxes in India" under NSF USA: Dynamics of Coupled Natural and Human Systems (CNH) Program in collaboration with the University of Georgia Submitted in November 2014

**Income generated:** Nil

25. **Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:** NA please see point 4

26. **Faculty serving in**

a) **National committees** b) **International committees** c) **Editorial Boards** d) **any other (please specify):** NA please see point 4

27. **Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):** Workshop on Algae Cultivation and Biofuel Production was attended by all members of the Centre except the Director, ABBC.

28. **Student projects**

• **Percentage of students who have done in-house projects including inter-departmental projects :** NA

**Development of technology for industries**

S. No.	Title	Name of the Student	Supervisor
<b>2011-12</b>			
1	Extraction and characterization of biopolymers	Arpita	M. Bhatnagar
2	Polybag cultivation of algae	Deepak Sharma	A. Bhatnagar
3	Cultivation on solid substrates in polybags	Megha Chauhan	A. Bhatnagar
4	Antioxidant activity of algal polymers	Payal Verma	M. Bhatnagar
5	Blood coagulation activity of algal polymers	Rakesh	M. Bhatnagar
6	Effect of steroids on algal growth in BG 11 medium	Priyanka Bohra	A. Bhatnagar
<b>2012-13</b>			
1	Extraction and characterization of biopolymer from <i>Anabaena oryzae</i>	Apoorva Rana	M. Bhatnagar
2	Effect of steroids on algae cultivation in DAP medium	Rashmi Chheepa	A. Bhatnagar
3	Algae cultivation in polybags on sewage	Chhattarpal & Rajesh Kumar	A. Bhatnagar
<b>2013-14</b>			
1	Comparison of methods of lipid estimation from algae	Mamta	M. Bhatnagar & Bharti Jain
2	Effect of different nitrogen sources on the growth of algae	Savita	A. Bhatnagar & Ritu Mathur
3	Gelling polymers from algae	Prafhull	M. Bhatnagar
<b>2014-15</b>			
1	Biomass to biopolymer conversion	Monica Chaudhary	M. Bhatnagar
2	Biopolymer characterization	Monica Jena	M. Bhatnagar
3	Thrombogenicity of polymers from algae/cyanobacteria	Anisha	M. Bhatnagar
4	Effect of nitrate on growth of algae	Anu	M. Bhatnagar
<b>2015-16</b>			
1	Polymer extraction from algae	Saroj Rathore	M. Bhatnagar
2	Polymer extraction from Spirulina	Padmini Rathore	M. Bhatnagar

### Development of technology for farmers

S. No.	Title	Name of the Student	Supervisors
<b>2011-12</b>			
1	Hydrolysis of algal biomass	Pramod	A. Bhatnagar
2	Bioethanol from Algae	Aatira	A. Bhatnagar
3	Seasonal assessment of biomass from Anasagar lake for biofuel production	Arun Kumar Jangid	A. Bhatnagar & P. Mathur
4	Screening mixotrophic algae	Syeda Kaenat	A. Bhatnagar
5	Algae cultivation on submerged surfaces	Parul Sharma	A. Bhatnagar
<b>2013-14</b>			
1	Extraction of nutrients from excreta of different animals	Pinki Khalbadania	A. Bhatnagar & S. Dutta
2		Vishnu	A. Bhatnagar & S. Dutta
3		Prateeksha Chatterjee	A. Bhatnagar & S. Dutta
4		Rupali Mathur	A. Bhatnagar & S.

			Dutta
5	Mass Cultivation of algae on different solid surfaces	Anjali	A. Bhatnagar
6		Rajnesh	A. Bhatnagar
<b>2014-15</b>			
1	Tray cultivation of algae in wastewaters	Shishram	A. Bhatnagar & P. Mathur
2	Suspended and submerged cultivation	Suresh & Ekta Yadav	A. Bhatnagar
3	Solid surface cultivation of algae	Deepti	A. Bhatnagar
4	Waste stream cultivation of algae	Chanchal, Vidisha & Vikash	A. Bhatnagar

- Percentage of students doing projects in collaboration with other universities/industry/institute : Nil

29. Awards/recognitions received at the national and international level by (Please see Evaluative report of the parent departments)

30. Seminars/Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any.

#### Workshops (National)

1. Algae Cultivation and Biofuel Production (26-31 July 2013) UGC Academic Staff College, MDS University Ajmer (~Rs. 2.0 lakh)

The workshop was the **first in the University** that had One



scientist from the UN's International Centre for Genetic Engineering and Biotechnology, New Delhi, two professors from IITs, two professors from IARI, New Delhi, one CSIR emeritus scientist along with experts from University of Rajasthan, Central University of Rajasthan, Birla Institute of Scientific Research and MDS University Ajmer as its resource persons. The participants too were represented by National Institute of Technology Durgapur and Hamirpur, National Botanical Research Institute, Gujarat Vidyapeeth, Universities of Madras, Karnataka, Gujarat and Mumbai and industries besides those of the state of Rajasthan.

#### Conference (International) Academic collaboration:

- The ABBC had academic collaboration with the Centre for ESBM in organising the Energy section of the 4<sup>th</sup> Biennial International Conference on Entrepreneurship, Tourism, Environment & Energy on 11-12.10.2014. It was entirely funded by the Centre for Entrepreneurship and Small Business Management of the MDS University, Ajmer. Prof. Dinesh Goyal, Thapar University, Patiala; Dr. B. Ramakrishan, Principal Scientist, IARI, N. Delhi; Dr. Senthil Chinnasamy Chief Technology Officer, Aban Infrastructure Ltd., Chennai were the Chairperson, and keynote addresses in energy section. The Conference was represented by delegates from Dubai, Czeck Republic, Delhi, Himachal Pradesh, Chhattisgarh, Madhya Pradesh, Andhra Pradesh, Maharashtra and Karnataka.

- Workshop on **Small Enterprises in Microbiology** in academic collaboration with the Department of Microbiology was held on 15-16 February 2010 for the farmers. It dealt with the production of Azolla as animal feed, Spirulina as super food, Blue Green Algae as biofertilizer and Vermicompost. 39 rural youth and 46 others including students, research

scholars, teacher, ex official of agriculture department and medical practitioner participated. Resource persons included Dr. Radha Prasanna Principal Scientist, IARI, New Delhi; Dr. Pravin Puranik and Dr. Kanan Puranik from the North Maharashtra University, Jalgaon, Prof. GN Mathur and Dr. Dinesh Arora from Krishi Vigyan Kendra, Tabeeji and Prof. Monica Bhatnagar and Prof. Ashish Bhatnagar from the Department of Microbiology.

31. **Code of ethics for research followed by the departments** as per the evaluative reports of the concerned departments of the faculty
32. **Student profile programme-wise:** NA please see point 4
33. **Diversity of students** NA please see point 4
34. **How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.** NA, please see evaluative reports of parent departments
35. **Student progression** NA, please see evaluative reports of parent departments
36. **Diversity of staff** please see evaluative reports of parent departments
37. **Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period** NA, please see evaluative reports of parent departments
38. **Present details of departmental infrastructural facilities with regard to research**

#### **Facilities developed**

Algae Cultivation Trial and Demonstration Area: 16 x 22 m fenced area with three trenches and small tray (1 x 1.5 ft) systems for solid surface and floating cultivations. Area is sufficiently big to put up Pilot Scale Mass cultivation Systems. Trenches, Small tray cultivation systems for solid surfaces (flowing water), Algal Turf Scrubber Type System and their variants have been erected, tried/are being tried..

#### **Facilities available**

Other than these, the Department of Microbiology has made available following facilities for the research under ABBC for use with condition that the work of the departmental students must not hamper.

#### **Thar Desert Microorganisms Collection**

Algae-Cyanobacteria: 41 strains

Bacteria: 88 strains Gram positive aerobic/facultatively anaerobic micrococci, hypercopiotrophs and oligotrophs, Keratinolytes

#### **Laboratory Infrastructure**

Storage: Refrigerators, Deep Freeze

Sample preparation: Yoder type sieving machine, Ampoule sealer, Instant sealer

Preparatory lab: Distillation stills, Millipore water Unit, Sterilizers, Aerosol disinfectant, Ovens, Filtration systems, Vacuum pumps, Laminar flows, Weighing balances

Growth room including Pass box, Room Temperature regulator, Sequential relay timer, Heat convector, Illuminated castor racks, air conditioners

Incubation and processing: Incubators, BOD Incubators, Anaerobic jar, Gyrotory shaker, Shaker incubator, Waterbaths, Refrigerated waterbath, CO<sub>2</sub> incubator, Cyclomixers, hot plates and magnetic stirrers

Environmental Chemistry: Oxitop BOD system (ABBC), Autokjeldahl digester and distillator, pH meters, Selective ion meter, Lux meter, Water quality analyzer, DO meter, Flame photometer, Soil moisture meter, Soil augur

Microscopy: Inverted Fluorescence, Dark Field, Polarizer, Phase Contrast photomicrographs, trinoculars, binoculars and monoculars, stereomicroscope

Cell fractionation and separation: Cyclomixers, homogenizers, microwave oven, ultrasonicator, centrifuges, refrigerated centrifuge, TLC and PC systems

Sample concentration: Rotary evaporator, lyophilizer, Heavy Duty Refrigerated Centrifuge (ABBC)

Data processing and bioinformatics: Computers, SPSS 13.0, Laptops, with printers

Teaching aids: Multimedia projectors, Smart board, Visualizer, OHP, LCD compatible OHP

Analytical biochemistry: ELISA Plate Reader, Colorimeter, spectrophotometer, UV-vis spectrophotometers, Fluorometer, Gas Chromatograph with data station, capillary attachment and FID, Brookfield viscometer, HPLC with PDA detector, Warburg manometers

Molecular Biology: Electrophoresis units, Gel Dryer, Gel rocker, Dry bath, Auto scanning densitometer, PCR

Office equipment: Xerox machine

39. **List of doctoral, post-doctoral students and Research Associates:** please see evaluative reports of parent departments
40. **Number of post graduate students getting financial assistance from the university:** Nil
41. **Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:** The Faculty at the Department of Microbiology had been working on algae, cultivation systems of algae and biofuel. In view of the growing Fuel demand and resource crunch on water and nutrients, the idea evolved to create an interdisciplinary centre for research on algae (Appendix II).
42. **Does the department obtain feedback from**  
Not applicable
43. **List the distinguished alumni of the department (maximum 10)** See Evaluative report of parent departments
44. **Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts:** See point 30.
45. **List the teaching methods adopted by the faculty for different programmes:** The Centre is meant for Research only
46. **How does the department ensure that program objectives are constantly met and learning outcomes are monitored?**  
There is a steering committee responsible for the planning, policy making, supervision and execution of the plans. It comprises of a research and technology development, demonstration and dissemination team (RTD3T) which is supervised by a directorial board.

#### *Functions of the RTD3T*

Each member of the RTD3T has a committed work area in the ABBC. He/she alone or in collaboration also submits research projects on these aspects for funding to various agencies through either his/her parent department or the ABBC. A summary of the submitted project is provided to the concerned Assistant Director of the ABBC for information. Each member also submits an annual update of his/her activities related to the aims and goals of the ABBC to the linking Assistant Director. Each faculty member of the RTD3T has the right to reject or accept inclusion of any new member in the RTD3T of the ABBC.

*Composition of RTD3T*

The current composition of RTD3T is as below, which has been prepared based on the mutual consent of each of the faculty members:

Dr. Ashish Bhatnagar, Professor, Dr. Monica Bhatnagar, Professor (Department of Microbiology) Dr. Praveen Mathur, Professor, Dr. Subroto Dutta, Professor (Department of Environmental Sciences), Dr. Bharti Jain, Professor, Dr. Ritu Mathur, Professor (Department of Food Science & Nutrition), Dr. Shiv Dayal Singh, Professor (Department of Economics), Dr. Ashish Pareek, Associate Professor and Dr. Deepika Sharma, Associate Professor (Department of Management). There is also provision for addition of new members.

*Directorial board***Functions**

Directorial board is responsible for the planning, policy making and overall supervision. It also incorporates activities as per the suggestions of the advisory board as far as possible and appraises the later of the annual progress made by the ABBC to realize its goals through E-mails/printed reports.

**Composition:**

Directorial board comprises of one director and six assistant directors.

Director-ABBC is appointed by the Vice Chancellor from the faculty members of the University who are part of the RTD3T of the ABBC. He/she is the one with maximum work experience in algae and/or algae biofuels as evident from the published work and research projects, Ph.D. projects, M. Phil. projects and M.Sc. projects handled and patents filed/obtained. He/she is responsible mainly for the planning the activities, execution of such plans and coordination of the activities being undertaken in the centre. He has financial powers equivalent to the Head of the Department.

There are assistant directors one each for Technology Development (from Microbiology department), Capability Building (from Microbiology department), Spent Biomass Utilization (from Food Science & Nutrition department), Technology Demonstration & Environmental Impact Studies (from Environmental Sciences department), Feasibility Assessment (from Economics department) and Technology Dissemination (from Management department). These are nominated by the Vice Chancellor from the RTD3T of the Algae Biofuel & Biomolecules Centre. Where number of associated faculty members is more than one from the same department, the assistant director is changed each year in rotation so as to allow maximum involvement of each of the team members. Each assistant director is responsible for the execution of planned activities in the area for which he/she is nominated. All research/consultancy projects and activities under a particular theme are coordinated by the assistant director. For the preparation of annual report of ABBC each assistant director gives inputs on projects initiated, research communications, workshop/seminar/symposia/training organized or participated in Ph.D./M.Phil./M.Sc. projects or thesis started and completed, patents applied and granted and policy papers prepared.

**Advisory Board**

*Functions:* The advisory board is annually apprised of the progress and the activities of the Centre by e-mail and/or snail mail. The Advisory Board evaluates the progress and suggests on improvement and incorporation of new activities under ABBC. However any suggestion having implications on finance and/or human resources is not binding for the steering committee.

Following is the composition of the advisory board:

1. Vice Chancellor, MDS University, Ajmer, Patron & Convener
2. Dean, PG Studies, MDS University, Ajmer
3. Director, Research, MDS University, Ajmer
4. Dr. S.K. Goyal, Retired Principal Scientist, NCCUBGA, IARI, N. Delhi
5. Prof. B.N. Johri, Emeritus Professor, Biotechnology Department, Barkatullah University, Bhopal
6. Dr. Anil Saxena, Head, Microbiology Division, IARI, New Delhi
7. Prof. Dolly Wattal Dhar, Microbiology Division, IARI, New Delhi
8. Dr. Arun Goyal, Professor, Biochemical Engineering, IIT, Guwahati
9. Dr. Ashish Bhatnagar, Professor, Department of Microbiology, MDS University, Ajmer

47. **Highlight the participation of students and faculty in extension activities:** Please see points 30.

48. **Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts.** Please see points 30.

49. **Give details of “beyond syllabus scholarly activities” of the Centre**

- **Organizing workshops/trainings and arranging tours** to the local streams for algal collections and microbiological features such as rock crusts, cryptobiotic crusts, algal flocs.

50. **State whether the program/department is accredited/graded by other agencies? If yes, give details.** No

51. **Briefly highlight the contributions of the centre in generating new knowledge, basic or applied.**

- **Mechanism deciphered**

1. ROS control by the biopolymers in Cyanobacteria might be contributing to a quicker healing of wounds (JAP)

- **Discovered**

1. Versatile, multiple utility exopolymer from *Anabaena variabilis* (JAP)
2. Novel blood clotting polymers from *Tolypothrix tenuis* and *Anabaena* sp. (CP)
3. Solid surfaces alleviate thermal stress in desert microalgae (IJA)



Cultivation of algae in polybags and Algal biopolymer based membrane for wound dressing

52. **Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**Major strengths:**

- **Learning by Doing:** Entire stress is on experimental training by doing as well as through workshops/training programs.

- **Academic interests of the faculty:** The faculty members have a strong academic background. Their bent for research, innovations, inventions and discoveries generate a sense of pride in the students and inspires them to work, as a result the laboratories remain open beyond office hours.
- First University in the state of Rajasthan that began Research in Algae Biofuel and finally established an interdisciplinary research centre in 2011.

#### **Weaknesses**

- Unavailability of separate funds (The Centre has to fend through the parent department or external funding only)
- Lack of permanent Faculty
- Time constraint to the faculty due to overall manpower shortage in the university

#### **Opportunities**

- **Location of the University:** The University is located in the semi arid and arid ecotone in the foothills of one of the oldest hill ranges of the world- the Aravallies. Beyond the hill range lies the desert providing excellent opportunities to discover new microorganisms and cultivate algae on wastewaters where no other crops can be grown.

#### **Challenges**

Developing cultivation systems that would use minimum amount of freshwater

### **53. Future plans of the Centre**

- To work on solid surface based cultivation systems
- To train students and develop human resources for the cultivation of algae and biofuel and biomolecules production through it. To achieve this objective, optional papers have been introduced at the Department of Microbiology that may be opted by students of M.Sc. under CBCS scheme. These are: MIC 433 Energy and alternative energy (1L credit) Semesters I and III and MIC 427: Biofuel and Bioenergy (3L + 2P credits) Semesters II and IV. Besides separate course is being planned for isolation, purification, laboratory cultivation of microorganisms.
- Workshops are planned for small enterprises in microbiology wherein Cultivation of Cyanobacterial biofertilizer, Spirulina, Azolla and production of Biogas are targeted.

## Research Impact

# थार रेगिस्तान की कार्ड रोकेगी खून का बहाव

थार में मिलने वाली हरी-नीली कार्ड पर हुआ रिसर्च, 5 से 7 सेकंड में जमा देते हैं खून का थक्का

अरुंधि अग्रवाल | अजमेर (राजस्थान)

थार रेगिस्तान में मिलने वाली हरी-नीली कार्ड से अब ज्यादा खून बहने से होने वाली मौत रोकी जा सकेगी। यह कार्ड मात्र 5 से 7 सेकंड में खून बहने से रोकने में मददगार होगा। एमडीएस यूनिवर्सिटी अजमेर में शैवाल जैव ईंधन एवं जैव अणु केंद्र (एनजी बायोपमूल फंड बायोमैटेरियल रिसर्च) से जुड़ी डॉ. मोनिका भटनगर के शोध में इस पर काम किया गया है। डॉ. भटनगर ने बताया कि हरी-नीली कार्ड (टोलेवापोरिक्स टेनुस और एनेबाेना को तीन प्रजातियां)

अपनी कोशिकाओं से प्रयोगशाला में एक लीटर खून में 0.34 ग्राम से 3.15 ग्राम तक शुगर के ऐसे बहुलक (पोलीमर) छोड़ते हैं, जोकि खून का थक्का मात्र 5 से 7 सेकंड में जमा देते हैं। कांच पर 12 सेकंड में खून जमाता है।

वर्तमान में खून बहने से रोकने के लिए उपलब्ध ड्रेसिंग बहुत महंगी है। इसे देखते हुए इन बहुलकों की खोज की गई। डॉ. मोनिका के अनुसार, शायद को भरने के पुराने तरीके में शुक्र ड्रेसिंग इस्तेमाल होती थी, जबकि आज यह काम नम ड्रेसिंग से किया जाता है। यह कद को कम करती है और घाव का निरास नहीं रहने देती।

## एंटीबायोटिक क्रिया दिखाते हैं बैक्टीरिया

कार्ड के बहुलक में आने वजन से 7 से 25 गुना अधिक कार्ब जैविक की क्षमता है। ये हरी-नीली कोशिकाओं को कार्ड लुकसात नहीं पहुंचाते और प्रकृति में आसानी से पुनर्जलित करते हैं। यही नहीं, ये बहुलक कार्ड को संक्रमित करने वाले बैक्टीरिया सुल्फोबैक्टीरिया, स्ट्रेप्टोकोकस, एन्टेरोकोकस और योस्टिरिया के विरुद्ध एंटीबायोटिक क्रिया भी दिखाते हैं। शोध से पता चल है कि इन कार्ड तंत्र के ऑक्सीटाइडिंग रसायनों के विरुद्ध एंटीऑक्सिडेंट क्रिया और लैक्ट अम्लों को बांधने की भी क्षमता है, जो घाव भरने की प्रक्रिया में सहायक है। यह रिपोर्ट जर्नल ऑफ एप्लाइड फायबरोसिटी (इमेजेंट फेक्टर 2.526) में छपी है।



## 6 दिन में भरे घाव

जयपुर की डॉ. वैष्णव धर्मा ने कार्ड के बहुलकों का प्रयोग कर इंसिफे करवाड़ी इनसे घुली की लत्या पर छिद्र गए प्रयोगों में 72 घंटे बाद भी एंटीबायोटिक प्रतिक्रिया नहीं मिली। छुई के घाव थिया रिहाय के 6 दिन में भर गए, जबकि एंटीबायोटिक आइसोट लगाते पर 10 दिन में घाव गया।



## Publications by the Faculty

## Development of technology for farmers

S. No.	Authors	Title	Journal	Vol series & pages	Year	Publisher	Journal Impact Factor
1	Ashish Bhatnagar, Senthil Chinnasamy, Manjinder Singh, K.C. Das	Renewable biomass production by mixotrophic algae in the presence of various carbon sources and wastewaters	Applied Energy	88:3425-3431	2011	Elsevier	5.613 SJR 3.15 H index 82
2	Bhatnagar, Ashish; Bhatnagar, M; Garg, MK	Solid Surfaces Alleviate Thermal Stress in Desert Microalgae	International Journal on Algae	16 (1): 68-85	2014	Begell House Inc. Danbury Connecticut	Nil SJR 0.12 H index 5

## Development of technology for industries

S. No.	Authors	Title	Journal	Vol series & pages	Year	Publisher	Journal Impact Factor
1	M. Bhatnagar, S. Pareek, J. Ganguly & A. Bhatnagar	Rheology and composition of a multi-utility exopolymer from a desert borne cyanobacterium <i>Anabaena variabilis</i>	Journal of Applied Phycology	24:1387-1394	2012	Springer	2.559 SJR 0.95 H index 62
2	Bhatnagar, M; Parwani, L; Sharma, V; Ganguly, J; Bhatnagar, Ashish	Exopolymers from <i>Tolypothrix tenuis</i> and three <i>Anabaena</i> sp. (Cyanobacteriaceae) as novel blood clotting agents for wound management	Carbohydrate Polymers	99: 692-699	2014	Elsevier	4.074 SJR 1.55 H index 110
3	Parwani, L; Bhatnagar, M; Bhatnagar,	Antioxidant and iron-chelating activities of cyanobacterial exopolymers with	Journal of Applied Phycology	26 (3), 1473-1482	2014	Springer	9 SJR 0.95 H Index 62

	Ashish; Sharma, V	potential for wound healing					
4	Monica Bhatnagar & Ashish Bhatnagar	Wound dressings from algal polymers pp 523-555	Se-Kwon Kim & Ktarzyna Chojnacka	Marine Algae Extracts: Processes, Products and Applications	2015	Wiley-VCH Verlag GmbH & Co.	---

### Papers/Poster papers presented in international/national conferences/ seminar/ workshop

S. No.	Title of paper	Title of conference/seminar etc
1	Ashish Bhatnagar Dark is not Drab: Mixotrophic cultivation system for simultaneous algae biofuel production and waste remediation (Oral)	International Conference on Algal Biorefinery, January 10-13, 2013. IIT Kharagpur
2	Monica Bhatnagar Cyanobacterial Exopolymers: The next gen wound management material (Poster)	International Conference on Algal Biorefinery, January 10-13, 2013. IIT Kharagpur
3	Monica Bhatnagar. Alternative Energy	Orientation program 31.1.2013 UGC ASC MDS University Ajmer
4-5	Ashish Bhatnagar 1. Diet of algae and 2. Ugly and Algae: Bioremediation and Biorefinery	Workshop on algae cultivation and biofuel production 26-31.7.2013 UGC ASC and Algae Biofuel & Biomolecules Centre, MDS University Ajmer
6	Ashish Bhatnagar: Biofuel Bubble: Boom or Bust?	4th Biennial International Conference on Entrepreneurship, Tourism, Environment and Energy Centre for ESBM, MDS University Ajmer (October 11-12, 2014)
7	Monica Bhatnagar: Algal Biorefinery: Wound Care Products and Fuel	
8	Ritu Mathur & Monica Bhatnagar: Health Care Products in an Algal Biorefinery Approach	
9	Bharti Jain. Nutraceuticals and Algaepreneurs	
10	Bharti Jain. Farming Algae as a Human Food	
11	Ashish Bhatnagar, Monica Bhatnagar Fuels, Fears and Future	3rd Global Sustainable Biotech Congress – 2014 (December 1-5, 2014) North Maharashtra University, Jalgaon

### Discussion papers presented in the Workshop Algae Cultivation & Biofuel Production (26-31.7.2013)

Green polymers in refinery approach: Monica Bhatnagar; Extraction and Transesterification of lipids: Arun Pareek; Opportunities in Biofuel & Energy Sector: Shiv Dayal Singh; Issues in Algae Culture: Ashish Bhatnagar; Alternative sources of energy: Subroto Dutta; Nature's Most Nutritious Green Food: Algae: Bharti Jain; Life Cycle Assessment of biodiesel production from microalgae: Praveen Mathur; Health and Nutritional Benefits of Algae: Ritu Mathur; Patents in Algae Cultivation: A review: Ashish Pareek; Patents in Biofuel Production: Current Status and Future Prospects: Deepika Upadhyaya

### Invited Lectures

1	Ashish Bhatnagar Bringing up a breathless civilization: Wastewater remediation, biofuel and biorefinery	5-7 March 2013 National Seminar in water and sewage management	UGC, Environmental Science Department, MDS University, Ajmer
2	आशीष भटनगर: स्फिरुलिना	Farmers Training Program (Crop diversification through seed spice	National Research Centre for Spice Seeds, Tabezi, Ajmer Rajasthan

		for higher production and productivity) 7-11.2.2014	
3	Ashish Bhatnagar "Algae Biofuels: The Goey Business"	National Conference on Recent Trends and Future Prospects of Microbiology and Biotechnology (3-4 March 2014)	JJT University, Jhunjhunu
4	Ashish Bhatnagar: Fuels & Fears for the Environment	World Environment Day 5.6.2014	Department of Environmental Science, MDS University Ajmer
5	Ashish Bhatnagar Biofuels	28 Jan 2015	Centre for Excellence, Government College, Ajmer
6	Ashish Bhatnagar Fuels in the Filth	2 <sup>nd</sup> February 2015 One day Symposium on "Biofuels : An alternative and non conventional energy source for future"	Sukshmjeev The Society of Department of Microbiology, Bhaskaracharya College of Applied Sciences, Delhi University Delhi under DBT Star College Scheme

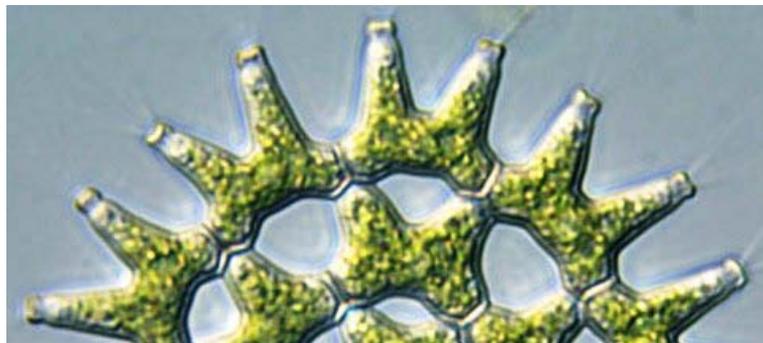
## Appendix II

**Algae Biofuel & Biomolecules Centre  
(ABBC)  
Maharshi Dayanand Saraswati University, Ajmer**

**A Study Centre established in lines of Section 5 (d) of the University Act**

**Department of Microbiology  
in collaboration with  
Departments of Environmental Science, Food Science & Nutrition, Economics and  
the Centre for Entrepreneurship & Small Business Management**

**The Concept**



- The objectives and activities of the Centre may be depicted through an insignia that shows half of a multicellular algal species *Pediastrum* that gives it a look of a green rising sun depictive of bioenergy.
- Sun depicts the region having ample of clear days and sunlight.
- It is also depictive of light, one of the most essential factors required for the growth of algae and cyanobacteria.
- A representative from Green Algae has been picked as these are the most promising forms as the accumulators of lipids that may be transformed to biodiesel.
- In Rajasthan, the two dominating groups of phototrophic microorganisms are green algae and cyanobacteria
- The structure also depicts a wheel that depicts movement, growth and technology.

### Directorial Board 15 March 2016 to 14 March 2017

1	Dr. Ashish Bhatnagar Department of Microbiology	Director	Algae Biofuel & Biomolecules Centre (ABBC)
2	Dr. Monica Bhatnagar Department of Microbiology	Assistant Director	Technology Development & Capacity Building
3	Dr. Praveen Mathur, Department of Environmental Science	Assistant Director	Technology Demonstration & Environmental Impact Studies
4	Dr. Bharti Jain, Department of Food Science & Nutrition	Assistant Director	Biomass Utilization
5	Dr. Shiv Dayal Singh, Department of Economics	Assistant Director	Feasibility Assessment
6	Dr. Deepika Upadhyaya, Department of Management	Assistant Director	Technology Dissemination

### Introduction

Price hike of petroleum products and its imminent depletion in sight have forced a serious thought on the alternative sources of energy. While coal can satisfy electricity demand for many years in USA, China and India, the CO<sub>2</sub> output nails it to dust. Moreover coal to oil conversion would mean a much faster rate of depletion of this source too. Wind is the cheapest but cannot be harnessed everywhere. Varying with weather; wind, tide and solar energy need to be converted to a storage form. Hydrogen is considered the answer but technology development needs time, while batteries cannot run heavy machinery and airplanes. Most of the sources of river based hydel energy have been tapped, option of nuclear energy is fraught with insecurities. The US alone needs 700-800 power plants to meet 75-85% of its electricity demand (Bhatnagar et al., 2009).

### Biofuels

Living organisms provide alternatives for energy viz. combustion, alcohol, biodiesel, biogas, biomass liquefaction, gasification, hydrogen and electricity through microbial fuel cells. Last three technologies are either not ripe or are costly. Biomass combustion is not an efficient way and leads to gases causing global warming and acid rain. Alcohol production depends on available sugars- use of disaccharides (sugarcane and sugarbeet) is easier and cheaper than starch (corn, cassava, wheat, algae) than the cellulosic (perennial grasses and algae) than lignocellulosic molecules (trees). Alcohol can be used to run vehicles but the energy output is 68% lesser than biodiesel and causes more pollution than the later. It can be obtained through plants and algae. Biogas is the cleanest of them all but biogas plant management is tricky and requires skill. Souring and odor are the frequent problems associated with it. Other than energy, oil is also needed to fulfill many of our day-to-day requirements. Unfortunately biological alternatives encroach other fast diminishing resources: land and freshwater that in turn affect availability of food. Land and freshwater demand though comparatively less, would be there for most of the other sources of energy as well. There are crops like cassava (2.5 mL/ha/year) for alcohol production, sunhemp for lignocellulosic mass, and jatropha (1.6 mL/ha/year) and mustard (1.35 mL/ha/year) for biodiesel that require very less water (Bhatnagar et al., 2009a). Wastewaters cannot be used for the irrigation of crops as ultimately the soils become toxic and less fertile. Estimates show that apart from drinking water, farmers would need ~4000 km<sup>3</sup> of water in 2050, as against current 2700 km<sup>3</sup>, if no new technological changes are incorporated (Amarasinghe et al., 2007). The global target for biofuel feedstock crop production for 2030 itself would demand 180 km<sup>3</sup> of water (IWMI, 2008, Chinnasamy et al., 2010).

*Diminishing petroleum and natural gas  
Price hike of fossil fuels  
Concerns of CO<sub>2</sub> emission*

## Global warming

More than 170 countries have ratified the 1997 Kyoto Protocol of the United Nations to make efforts to reduce greenhouse gases by 5.2% on the basis of the emissions in 1990 (Gutierrez et al., 2008). Biological CO<sub>2</sub> mitigation appears an attractive strategy as it produces biomass based energy in the process of CO<sub>2</sub> fixation through photosynthesis (de Morais & Costa, 2007; Kondili & Kaldellis, 2007; Wang et al., 2008). Combustion of fossil fuels contributes to the atmosphere approximately 6 Gt C per year world-wide (IPCC 2007, Chinnasamy et al., 2009). CO<sub>2</sub> mitigation by plants contributes only to 3-6% of fossil fuel emissions (Skjanes et al., 2007). Amongst all phototrophic organisms, aquatic microbial oxygenic phototrophs (cyanobacteria and microalgae) are special inasmuch as they grow fast, perform 10-50 times more efficient photosynthesis than plants, and require lesser energy and labour than the cultivation of crops (Li et al., 2008). In recent times, microalgae have been promoted for CO<sub>2</sub> mitigation as they can be grown in wastewaters and capture CO<sub>2</sub> from high-CO<sub>2</sub> streams such as flue and flaring gases with CO<sub>2</sub> contents ranging from 5-15% (Hsueh et al., 2007). Further, they do not pose any risk to drive up food prices and exacerbate CO<sub>2</sub> release through the forced clearing of natural ecosystems (Dismukes et al., 2008).

## Algae biofuel

Given the grim energy scenario, algae appear to be the ultimate savior. Though they require 11 mL water/ha/year, but this can be either marine water or wastewater and so saves on freshwater. India consumed 25 billion m<sup>3</sup> water per annum (1987-2003) for domestic purposes and 15 billion m<sup>3</sup> for industrial purposes. If only half of this could be used to grow algae, it would need 1818ha land and would produce 22 mT of algae oil. Rest of the demands can be met through marine water. Not only this, cultivation of algae in wastewater leads to reduction in pollution as a result this water can be used for some other purposes (Bhatnagar et al., 2009b; Chinnasamy et al., 2010). Algae require 400 to 500 times less land than soybean crop to produce the same amount of biomass in the same duration of time. Moreover this land too, can be any wasteland or non productive land. Cultivation on wastes also saves on fertilizers, another input that needs to be saved for agriculture. Algae consume ~3 times more CO<sub>2</sub> than the plants. An algae based fuel production process will be carbon neutral as it would fix the carbon dioxide generated in the process of burning the fuel. A number of algae store starch and cyanobacteria store glycogen that can be used to produce alcohol. On the other hand many green algae and diatoms accumulate oil that can be transesterified to biodiesel. After starch/glycogen/oil extraction, the biomass can be used to produce biogas and ultimately the slurry from the biogas plant can be used as manure for crops or forests.

Currently production of 1 kg of dried algae costs Rs. 250/-. This cost however needs to be brought down to Rs. 10/- per kg for economic feasibility. One way is to reduce the cost of fertilizer input for which waste waters can be utilized. On the other hand biomass based industry would have to work as a refinery, wherein maximum possible products shall be separated from the biomass and put to commercial or ecological use.

Maharshi Dayanand Saraswati University Ajmer established "Algae Biofuel & Biomolecules Centre (ABBC)" in lines of Section 5 (d) of the University Act in 2012. It is an interdisciplinary program focused on research, technology development, education and outreach programs related to algae biofuels and Biomolecules production. It involves 9 faculty members of five disciplines. The ABBC would develop technology for biofuel production through algae and simultaneously determine if other utility biomolecules can be produced from the spent biomass or *vice versa*. The state of Rajasthan in India has two advantages, one- it has long sunshine hours and cloud free days almost throughout the year

and two-there is no dearth of land that lies barren in the desert country. Thus technology development at ABBC is focused on reduction or elimination of the need of freshwater and aid in the reduction of overall pollution load by algaeculture. Simultaneously waste streams will be targeted to supply necessary nutrients to curtail costly fertilizer input. We have shown mixotrophic algae to be the role models in dark wastewater systems (Bhatnagar et al. 2009b). The ABBC would evaluate different reactor systems. It also intends to probe nutrient delivery mechanisms, alternatives to centrifugal harvesting and cell disruption and biomethanation of algal biomass. Other possible uses related to fuel will be explored in collaboration with other institutes such as thermoliquefaction, pyrolysis and gasification of biomass for which correspondence is going on.



**Algae growing isolated and on solid surface**

As per the CIA Worldbook (2012), India needs 3.182 bbl (~50.6 million L) oil per day, to meet this demand through algae biofuel, India would need ~21 million ha land. Approximately half of the required land area may come through the wastelands and the villages meeting 50% of our petro-fuel demand.

### Objectives

The ABBC aims to develop and disseminate economically feasible technology for biofuel production through algae and generate skilled manpower with a larger goal to wheel India's economic growth through carbon dioxide-neutral biofuels without using freshwater and arable land and simultaneously reducing its pollution load. Following objectives are set to meet the goal:

1. Technology development for algae biodiesel production
2. Technology development for alternate algae biofuels production
3. Capability Building (HRD & Information dissemination)
4. Technology development for the production of non fuel biomolecules from the spent algal biomass
5. Technology demonstration and environmental impact assessment
6. Feasibility assessment
7. Technology dissemination, IPR & Human resource requirement assessment

### Functions

Primarily a research and outreach program, the ABBC intends to develop into an education program as well and has following functions:

- Research and technology development and demonstration
- Research collaborations
- Information dissemination
- Capability Building

### **Information Dissemination**

Workshops, Training programs, Seminars and Conferences will be conducted for the dissemination of information.

### **Capacity Building**

The purpose of capability building is to train and equip the students to meet the challenges of the biofuel energy sector and convert them into opportunities of entrepreneurship and employment. Activities include School Level Programs (SLPs), training for PG & UG students and post PG students, organization of workshops for teachers and Seminars and Conferences. As soon as more faculty members are inducted who are specialized in molecular biology (biotechnology), biochemical engineering, macromolecule chemistry and lipid chemistry, a PG course in microbiology with specialization in biofuel and biomolecule production will be started.

### **Expected outcome through ABBC**

- 1) Farmer friendly technology: Open cultivation system based utilizing wastewater and marine water- main product would be oil/alcohol, biogas and biomass (manure/chick feed/compost) would be the secondary products. and
- 2) Industry friendly technology: Closed photobioreactors based, dependent on freshwater-main products may be fine chemicals or pharmaceutical products while fuel/energy shall be the secondary products.

Development of such technology will have positive influence on the following socioeconomic aspects:

- New employment opportunities (>700 major venture capital activities globally)
- Possible empowerment of farmers through algae based biodiesel, alcohol and biogas farming
- Development of a new industry- Biorefinery
- Savings on foreign exchange by reducing dependence of import of petroleum
- Freedom to the foreign policy from OPEC enforcements
- Formation of league of countries producing biofuels
- Self sufficiency of fuels during wars
- Protection of interests related to internal and external security
- Fulfilment of Corporate Social Responsibility by making wastewater remediation cost effective or profitable through algae biomass-biofuel production
- Remediation of wastewater
- Carbon credits through algae cultivation
- Biodegradable polymers and other biomolecules equivalent to petro-by products

उद्यमिता  
एवं  
लघु व्यवसाय प्रबंधन  
केंद्र  
CENTRE  
FOR  
ENTREPRENEURSHIP  
&  
SMALL BUSINESS  
MANAGEMENT

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1. Name of the Department: Center for Entrepreneurship and Small Business Management
2. Year of establishment: 2004
3. Is the Department part of a School/Faculty of the university? : Faculty of Management Studies
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
  - Master of Business Administration (Dual Specialization) {MBA – DS} 2 year post graduate course
  - Master of Business Administration (Executive Programme) {MBA – EP} 3 year post graduate course
  - Master of Business Administration (E-Commerce) {MBA – e-com} 2 year post graduate course
  - Bachelor of Business Administration (Entrepreneurship & Family Business Management) {BBA – E&FBM} 3 year under graduate course.
5. Interdisciplinary programmes and departments involved
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
7. Details of programmes discontinued, if any, with reasons
  - Bachelor of Business Administration (Entrepreneurship & Family Business Management) {BBA – E&FBM} 3 year under graduate course.
  - Due to decrease in demand
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester
9. Participation of the department in the courses offered by other departments  
Nil
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)  
Nil
11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance  
At present Center does not have any permanent faculty. Teachers from Commerce and Management Department are looking after the administrative issues of the Center beside their regular workload and departmental duties.  
Information regarding this point has been included in the profile of their respective departments.
  - Academic work is taken care of by seven contract faculties. There is no full time/permanent faculty.
12. List of senior Visiting Fellows, adjunct faculty, emeritus professors :  
Nil

13. Percentage of classes taken by temporary faculty – programme-wise information  
100% as all faculty is on contract.
14. Programme-wise Student Teacher Ratio
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual :
  - Sanctioned – Nil,
  - On contract: one office staff, one library in-charge.
16. Research thrust areas as recognized by major funding agencies:
  - Although no funding has been received for research so far, but research thrust area is Entrepreneurship and Small Business Management
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.
  - Nil
  - All faculty on contract
18. Inter-institutional collaborative projects and associated grants received : Nil
  - a) National collaboration
  - b) International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. Nil
20. Research facility / centre with : Not applicable
  - state recognition
  - national recognition
  - international recognition
21. Special research laboratories sponsored by /created by industry or corporate bodies
22. Publications:
  - Not applicable, all faculty on contract
23. Details of patents and income generated : Not applicable
24. Areas of consultancy and income generated : Not applicable
25. Faculty selected nationally/internationally to visit other laboratories/institutions /industries in India and abroad :
  - Not applicable, all faculty on contract
26. Faculty serving in
  - a) National committees b) International committees c) Editorial Boards d) any other (please specify)
  - Nil, all faculty on contract
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops,

- training programs and similar programs).
  - Nil
28. Student projects : nil
- percentage of students who have done in-house projects including inter-departmental projects
  - percentage of students doing projects in collaboration with other universities/industry /institute
29. Awards/recognitions received at the national and international level by : nil
30. Seminars/Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.
- **Source of funding:** Self financed
  - **List of programmes:**
    - The Center organized Third (3rd) Biennial International Conference themed “Entrepreneurship in Growing Economies” during January 22-23, 2011. The conference was attended by around 150 delegates from around the globe and various parts of the country. The delegates from Canada, Iran, South Korea and Nepal participated in the conference. During the inaugural session Dr Poonam Sinha, Head, IIE Regional Office, Dehradun was the Chief Guest, Prof Nimit R Chowdhary was Guest of Honour and Hon’ble Vice-Chancellor presided over the function. In the valedictory session of the conference Chief Guest Prof Jagdish Phatak, Professor, University of Windsor, Ontario, Canada delivered keynote address on the Bootstrapping. Shri R S Choyal, an entrepreneur of Ajmer, was the Guest of Honour and Hon’ble Vice-Chancellor presided over the function.
    - The Center organized Fourth (4th) Biennial International Conference on Entrepreneurship, Tourism, Environment and Energy during October 10-11, 2014. The themes of the conference were quite contemporary and interrelated. There were 153 registrations for the conference from India and abroad. Seventy Three (73) presentations were made in the four tracks of the conference.
    - The Center organised One Day Workshop for State Universities Regarding Establishing and Operating Entrepreneurship and Small Business Center on January 23, 2016. The objectives of the workshop were to deliberate on issues and challenges in establishing and operating Entrepreneurship Centers in University set up and to share experience of managing Center for ESBM at MDS University, Ajmer.
    - A One Day Women Entrepreneurship Development Programme was organized with the collaboration of National Research Development Corporation, New Delhi (An Enterprise of DSIR, Ministry of Science and Technology, Government of India, New Delhi) on December 08, 2011. There were 100 (One hundred) women participants in the programme.
    - One day e-Learning Awareness Programme was organized in the Center on December 9, 2013. 100 participants participated in this e-Learning Awareness Programme.
    - Center had organized a seminar on ‘Opportunities and careers in Management’. The expert who guided the students on the subject was Prof Nimit Chowdhary, Professor and Nodal Officer, Indian Institute of Tourism and Travel Management (IITTM), Noida Campus, Noida on May 24, 2014.

- **Details of ESDP's organized with IIE Regional Office, Dehradun & NIESBUD Regional Office Noida, Dehradun (Sponsored by Ministry of MSME, Govt. of India)**

S. No.	Name of Course	Duration in hours	Organising dates	No. of Students
1.	Multimedia & Web Designing	200	01.09.2010 to 23.10.2010	25
2.	Fashion Designing	200	01.09.2010 to 23.10.2010	23
3.	Multimedia & Web Page Designing	200	25.11.2010 to 17.01.2011	30
4.	Multimedia & Web Page Designing	200	25.11.2010 to 17.01.2011	30
5.	Fashion Designing	200	25.11.2010 to 17.01.2011	30
6.	Interior Designing	200	25.11.2010 to 17.01.2011	30
7.	Multimedia & Web Page Designing for SC Candidates	200	28.03.2011 to 20.05.2011	30
8.	Multimedia & Web Page Designing for SC Candidates	200	08.08.2011 to 14.10.2011	30
9.	Fashion Designing for SC Candidates	200	08.08.2011 to 14.10.2011	30
10.	Multimedia and Animation	150	21.12.2011 to 03.02.2012	25
11.	Cosmetology & Beautician	150	19.12.2011 to 03.02.2012	25
12.	Cosmetology & Beautician	150	16.01.2012 to 29.02.2012	25
13.	Fashion Designing	150	16.01.2012 to 29.02.2012	25
14.	Interior Designing	150	18.01.2012 to 29.02.2012	25
15.	Cosmetology & Beautician	125	28.02.2012 to 31.03.2012	25
16.	Fashion Designing	125	27.02.2012 to 31.03.2012	30
17.	Bakery Products	125	28.02.2012 to 31.03.2012	30
18.	Computer Accounting with Tally	250	24.04.2012 to 30.06.2012	25
19.	Computer Accounting with Tally	250	24.04.2012 to 30.06.2012	28
20.	Multimedia and Animation	300	24.04.2012 to 30.06.2012	25
21.	Web Designing	300	24.04.2012 to 30.06.2012	25
29.	Receptionist	125	26.02.2013 to 30.03.2013	25
30.	Land Landscape Design	125	19.02.2013 to 26.03.2013	25
31.	Bakery	125	18.02.2013 to 25.03.2013	25
32.	Catering	125	20.02.2013 to 27.03.2013	25
33.	Catering	125	28.02.2013 to 30.03.2013	25
34.	IT Tools and Application	250	03.12.2014 to 20.02.2015	25
35.	Microsoft Office	125	23.12.2014 to 04.02.2015	25
	Total			921

- **ESDP's organized with Ministry of Women and Child Development, Government of Rajasthan, Jaipur**

S. No.	Name of Course	Duration in days	Organising dates	No. of Trainees
36.	Tailoring for Women, Adarsh Nagar, Ajmer	26 days	12.06.2015 to 08.07.2015	30
37.	Fashion Designing for Women, Police Line, Ajmer	26 days	12.06.2015 to 08.07.2015	30
38.	Beauty Parlour Activity	26 days	21.06.2015 to	30

	(Beautician), Dholabhata, Ajmer		18.07.2015	
39.	Tailoring for Women, Bhilwara	26 days	12.08.2015 to 08.09.2015	30
40.	Fashion Designing for Women, Nagaur	26 days	10.09.2015 to 06.10.2015	30
41.	Beauty Parlour Activity (Beautician), Tonk	20 days	03.12.2015 to 23.12.2015	30

- **Details of ESDP's financed and organized by Center's own funds**

S. No.	Name of Course	Duration in hours	Organising dates	No. of Students
1.	Milling Science	240	27.07.2013 to 04.09.2013	30
2.	Kantha Embroidery	90	16.08.2013 to 31.08.2013	30
3.	Kantha Embroidery	90	02.09.2014 to 23.09.2014	25
4.	Tailoring for Women at Shastri Nagar, Kacchi Basti, Ajmer	40	17.05.2015 to 07.06.2015	30
5.	Tailoring for Women at Shastri Kacchi Basti, Ajmer	40	17.05.2015 to 07.06.2015	30
6.	Tailoring for Women at Shastri Nagar, Kacchi Basti, Ajmer	40	17.05.2015 to 07.06.2015	30
7.	Tailoring for Women at Idgah, Ajmer	40	07.06.2015 to 26.06.2015	38
8.	Tailoring for Women at Idgah, Ajmer	40	07.06.2015 to 26.06.2015	38
9.	Tailoring for Women at Idgah, Ajmer	40	07.06.2015 to 26.06.2015	38
10.	Tailoring for Women at Muhami Village, Ajmer	40	30.09.2015 to 22.10.2015	30
<b>Total</b>				319

31. Code of ethics for research followed by the departments : Not applicable

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Master of Business Administration (Dual Specialization) {MBA – DS} 2 year post graduate course	48	26	14	Result awaited	Result awaited
Master of Business Administration (E-Commerce) {MBA – e-com} 2 year post graduate course	41	19	16	Result awaited	Result awaited

33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
Master of Business Administration (Dual Specialization) {MBA – DS} 2 year post graduate course	98	1	1	Nil

Master of Business Administration (Executive Programme) {MBA – EP} 3 year post graduate course	100			
Master of Business Administration (E-Commerce) {MBA – e-com} 2 year post graduate course	100			
Bachelor of Business Administration (Entrepreneurship & Family Business Management) {BBA – E&FBM} 3 year graduate course.	93	7	Nil	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

35. Student progression

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
<input type="checkbox"/> Campus selection	
<input type="checkbox"/> Other than campus recruitment	
Entrepreneurs	

36. Diversity of staff:

- o Faculty on contract

Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

- o Not applicable, faculty on contract

37. Present details of departmental infrastructural facilities with regard to

a) Library: Number of books: 10,082.

b) Internet facilities for staff and students : yes, wi- fi facility available

c) Total number of class rooms :

- o Number of class rooms:08
- o Library room: 01
- o Training rooms:02
- o Computer lab rooms: 02
- o Auditorium: 01
- o Staff rooms: 04

d) Class rooms with ICT facility: all rooms

e) Students' laboratories : all

- f) Research laboratories: not applicable
39. List of doctoral, post-doctoral students and Research Associates: Not applicable
40. Number of post graduate students getting financial assistance from the university: Nil
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.  
As advised by the Board of Studies (BoS) and Center's Advisory Council (AC).
42. Does the department obtain feedback from
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
  - alumni and employers on the programmes offered and how does the department utilize the feedback?
- Feedback is taken from the students who have completed their study and are about to leave the Center. The feedback is on a more broader aspect about their experience at the Center and suggestion are taken care of.
  - Feed back about on contract teaching faculty is taken.
43. List the distinguished alumni of the department (maximum 10)
44. Give details of student enrichment programmes (special lectures/workshops/ seminar) involving external experts.
- A special lecture was organized to help student gain an insight into the evolving role of management in today's business by Prof. Azhar Kazmi, Professor, Department of Management & Marketing, College of Industrial Management, King Fahd University of Petroleum & Minerals, Saudi Arabia on August 9, 2014.
  - A special lecture was organized for all the students of the Center, where the key note speaker was Shri Hanuman Singh Ji Rathor who made the students familiar with the teachings and life philosophy of Yug Purush Swami Vivekananda on August 12, 2014.
  - A lecture on 'National Security and Our Responsibility' was organized by Retd. Lt. General Sumer Singh Ji to help students be aware of their responsibilities towards the national security in their own small societal environment on September 15, 2014.
  - Prof. Rajeshwari Narendran from Mohan Lal Sukhadia University, Udaipur organized an expert lecture to help students gain varied practical knowledge about managerial role and challenges, with the help of management games on September 30, 2014.
  - A special lecture on 'Financial Planning and Markets' was organized by the Center on December 5, 2014. Mr Rakesh and Miss Asha Sharma from IDBI Federal guided the students on the above subject.
45. List the teaching methods adopted by the faculty for different programmes.  
Case studies, Management Games, Minor real-time projects, Role-plays, Syndicated discussions, Panel discussions, Presentations and assignments, quiz etc. These are included in internal evaluation also.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
Programme objectives are clearly mentioned in the syllabus. Continuous internal

evaluation is so developed so as to achieve the desired objectives.

47. Highlight the participation of students and faculty in extension activities.
  - Industry visits
  - Inter class competitions
  - Entrepreneurship Development programmes
  - An exhibition-cum- sale on Creativity
  - moc representation/ role play of financial institutions
  - operating stalls and selling items of their choice in the Udyog Craft Mela organized by District Industries Centre (DIC), Ajmer so as to get a sense of business.
48. Give details of “beyond syllabus scholarly activities” of the department.
  - Induction programmes
  - Special lectures
  - Personality development seminars
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details.
  - no
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
  - Contributing in promoting entrepreneurship as a socio-cultural value.
  - augmenting valency for entrepreneurial activity- that students see it as an honorable and preferred mechanism for employment.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
  - *Strength*: Financial sound position.
  - *Weakness*: Lack of permanent faculty and administrative staff.
  - *Opportunity*: Skill India, Make in India programmes have made E'ship a buzz word. Many programmes are available from government regarding entrepreneurship development.
  - *Threats*: Many organizations were coming into the field of entrepreneurial teaching and training.
52. Future plans
  - Reaching out to whole region in providing entrepreneurial teaching and training.
  - Expanding horizon in the area of Tourism and Travel.

डॉ. भीम राव अम्बेडकर  
शोध पीठ

**DR. BHEEM RAO AMBEDKAR  
SHODH PEETH**

Dr. B. R. Ambedkar Shodh Peeth was established during Convocation Ceremony on October 6, 2015 when Hon'ble Governor of Rajasthan Shri Kalyan Singh had put forth the need for Dr. B.R. Ambedkar Shodh Peeth and the Vice Chancellor Prof Kailash Sodani has immediately announced for the Peeth with funding of Rs. one crore from the Maharshi Dayanand Saraswati University Ajmer. It is spacious and capable of providing varieties of services to Teachers, Scholars, Student and Public by regularly organizing Lecture series, Seminars, Conference, Discussion, Exchange of thoughts, Symposia and conducting field based studies for grass root planning.

Dr Ambedkar was a man of versatile genius, great economist, constitutionalist, social reformist, apolitical thinker, a champion for downtrodden and above all the great humanist. All through his life he struggled to establish the basic principles- Liberty, equality and fraternity in all walks of life in the society. To achieve these he used his mental calibre and followed constitutional methods. His entire life was of great struggle to emancipate the exploited people.

Based on values of an egalitarian social order like justice, liberty, equality, fraternity and secularism as envisaged in the Constitution of India and guided by the views, ideas, thoughts and philosophy of Dr. B.R. Ambedkar, the mandate of the Peeth is to work for the development of the society in general and the deprived and socially discriminated sections in particular through research, teaching, training, sensitization and extension programs.

The **vision** is to ensure social emancipation, economic empowerment, educational excellence and participation of Dalit in Nation Building.

The main **motto** of studying the socio-economic status of the SC/ST population in Rajasthan to enlist every major and minor problem needs of the communities and to the other related research studies. It is also intended to perform evaluation study on the ongoing schemes, programmes of the Peeth to see the extent to which they have been successful and reach the deserved class and people, since such studies throw more light deeper than the administrative inspection reports.

### **Activities**

Conducting survey and study on socio-economic status of SC/ST, research in specific and general areas to undertake ethnographic and anthropological studies on castes and sub-castes, synonyms for inclusion for inclusion/deletion pertaining to reservation policy, undertake evaluation study and sample survey to assist the research scholars ( M. Phil. / Ph. D. ) who are interested in undertaking studies on problems of SC/ST in different regions of Rajasthan, Special studies will also be taken on atrocities & untouchability and measures to be taken on preventing them, evaluation studies to examine the impact of Government welfare measures implemented by both State & Central Government.

### **Aims and Objectives**

- The Peeth's objective is to propagate the ideas and ideals of Bharatratna Dr. Babasaheb Ambedkar on society, economy and polity.
- To focus attention on the contributions of Dr. Ambedkar for the upliftment of the socially and economically deprived sections of the society.

- To study the impact of ideologies of Ambedkar such as Liberalism, Democracy, Socialism and Marxism in reconstruction of Indian society.
- To study the impact of various socio – political ideologies on Ambedkar`s thinking.
- To study Ambedkar`s constitutional and legal thoughts and their relevance on contemporary society.
- To study contemporary versions of religion with special reference to Buddhism as Perceived by Ambedkar.
- To compare and contrast Ambedkar`s philosophy with Buddha, Basaveswara, Jyothiba Phule, Karl Marx, Gandhi, Lohia and other Social thinkers.
- To encourage publishing, training and extension activities on and about Ambedkar and social issues.
- To carry out Research Activities on Ambedkar and related areas.

**Director (Hon.):** Prof. Shiv Prasad

पृथ्वीराज चौहान  
ऐतिहासिक  
एवं  
सांस्कृतिक  
शोध केंद्र

**PRITHVIRAJ CHOUHAN  
HISTORICAL  
&  
CULTURAL  
RESEARCH CENTRE**

Ajmer has its historical significance since the prehistoric age. During 6<sup>th</sup> or 7<sup>th</sup> century B.C. the Chauhan Rajputs occupied the region and founded the Chauhan empire. The great ruler Prithviraj Chauhan the ruler of Ajmer and Delhi also has great significance. Ajaypal was the founder of Ajmer or Ajmer. Due to not only religious or cultural importance of the province but due to the strategic importance of the region Ajmer was remain centre of political and diplomatic activities of various rulers. The Turks, the Mugals, the Marathas and the British occupied Ajmer. Similarly Ajmer changed hands among the rulers of Rajputana and the Marwar and Mewar. In 1956 the Ajmer Merwara state was integrated with the state of Rajasthan.

Keeping the socio-religious and cultural significance in mind, MDS University, Ajmer established the Shodh Kendra in 1997. The objectives mainly are to study and research the history and culture of Rajasthan particularly. To achieve the objective the Shodh Kendra is expected to work on the following targets-

1. Survey Rajasthan for its socio-cultural heritage
2. Collect original sources for archiving and preserving them as photocopies at the centre
3. Conduct research to establish facts in the history of Rajasthan.
4. Organize seminars, conferences, workshops and training on historical and cultural history of heritage rich Rajasthan and publish research journal
5. Publish material related to the history of Rajasthan

### Activities

The Centre has already published a book titled “विराट व्यक्तित्व सम्राट पृथ्वी राज चौहान” ISBN No. 978-93-82311-83-6, (Ed. Shiv Dayal Singh) published by Royal Publications, Jodhpur containing articles from experts on the subject.

A National Seminar is being organized on “सपादलक्ष एवं अजयमेरु का चौहान वंश” on May 7<sup>th</sup>, 2016.

In the first phase the Shodh Kendra organized the seminars and workshops in the subject and collected the sources for the research, which are preserved carefully in the library.

For the last few years the activities of the Kendra were held because of certain reasons. Now the Vice-Chancellor has allotted Rs. One Crore to the Shodh Kendra to give speed to activities of the Shodh Kendra.

The Shodh Kendra has organized a workshop of teachers of history in the month of January 2016. It is going to publish a book on Prithvi Raj Chauhan and his times, which is in the Press.

### Future activities

The Shodh Kendra has decided to organize National Seminars on the culture of Rajasthan and another on the history of Chauhans.

A workshop on the subject pattern of teaching of history of Rajasthan, with special reference to the history of Chauhans is being organized.

It has also been decided to publish a periodic Research Journal on the subject history and culture of Rajasthan. In coming months of this year onwards Shodh Kendra is the undertake projects on the subject concern to achieve the objectives.

**Director (Hon.):** Prof. Shiv Dayal Singh

सिन्धु  
शोध पीठ

SINDHU  
SHODH PEETH

## INTRODUCTION

The Sindhu Shodh Peeth (S S P) was established on 21-9-2015 in the Maharshi Dayanand Saraswati University campus as a Research Centre. The inception of the S S P was started in the month of February 2015, when the University organized two day National conference on "Sindhi Story-Centenary Celebration, 13-14 Feb. 2015". Thereafter, the Ministry of Human Resource Development, Government of India decided to sanction Rs. One crore to promote Sindhi language through National Council for Promotion of Sindhi Language.

A one day workshop was organized on 8<sup>th</sup> July 2015, in that workshop a Memorandum of Understanding was signed between **Maharshi Dayanand Saraswati University, Ajmer** and the **National Council of Promotion of Sindhi Language, New Delhi** to establish Sindhu Shodh Peeth in the M.D.S. University Campus. The University also contributed Rs. One crore for the establishment of S.S.Peeth.

### Thrust Area

The Thrust area of Sindhu Shodh Peeth will be research, teaching, translation and extension activities etc. through Sindhi, English and Hindi languages

### Objectives

The objective of Sindhu Shodh Peeth is to provide research facilities for students, academicians, intellectuals to undertake studies and research work on the subjects related to Sindhu Civilization (Mohan-jo-darro & Harrapa), Sindhi language & Literature, Sindhi Art & Culture, Social strata of Sindhi Population and History of Sindhi population.

### Functions

These objectives shall be achieved not only by conducting research and teaching, but also by organizing Seminars, Symposia, Workshops, Publication work, financial support to minor research project and other similar academic activities.

In this context, a one day seminar was organized on 12<sup>th</sup> March 2016 on the topic "Importance of Mother tongue.

### Administrative Setup

Director : Prof. Laxmi Thakur

### Future Plan

In the coming future the Sindhu Shodh Peeth is going to start the following academic courses on the "Sindhi culture and civilization".

- Certificate course (Duration 6 months)
- Diploma course (Duration one year)
- Ph.D. (Eligibility & Admission process will be as per University Rules).

विश्वविद्यालय अनुदान आयोग  
मानव संसाधन विकास केंद्र

**University Grants Commission  
HUMAN RESOURCE DEVELOPMENT  
CENTRE**

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1. Name of the University - Maharshi Dayanand Saraswati University, Ajmer  
and address of the Academic Staff College - Director, Academic Staff College, Maharshi Dayanand Saraswati University,  
- Pushkar Bypass Road, Ajmer
- a. Office Phone No: - 0145- 2788250  
-0145- 2787412,2787413,2787414 (Ext. 238)
- b. Mobile No. - 9414013570
- c. Residence Ph.No. & E-mail - [ugcascmdsu@gmail.com](mailto:ugcascmdsu@gmail.com). (0145-2630444)
2. Year of establishment of ASC - 2000
3. (a) Present staff as approved by UGC and accordingly employed at the ASC

<u>Name</u>	<u>Designation</u>	<u>Scale of Pay</u>	<u>Date of Joining</u>	<u>Whether full time/ Additional Charge</u>
Prof. G.K.Kohli	Director	37400-67000		Additional Charge
Murari Lal	Steno	9400-35000		Full time (Univ.Staff)
Mukesh Lakhan	L.D.C.	9300- 34800		Full time (Univ.Staff)
Kundan Singh	IV <sup>th</sup> Class	No Scale On fixed emoluments		Full time (Univ.Staff)

- 4) (a) Orientation programmes conducted from inception to 31-03-2015

<b>Total Number of Orientation Programmes conducted</b>	<b>Total Number of Participants</b>		
	Male	Female	Total
<b>2000-2001 (01)</b>	23	32	<b>55</b>
<b>2001-2002 (01)</b>	21	30	<b>51</b>
<b>2002-2003 (01)</b>	22	21	<b>43</b>
<b>(1) 2009-2010</b>	08	13	<b>21</b>
<b>(I) 2010-2011</b>	23	17	<b>40</b>
<b>(II) 2010-2011</b>	23	08	<b>31</b>
<b>(1) 2012-2013</b>	07	07	<b>14</b>
<b>2013-14 Nil</b>	-	-	-
<b>2014-15 Nil</b>	-	-	-
<b>2015-16 Nil</b>	-	-	-

- b) Refresher Courses conducted from inception to 31-03- 2015

<b>Total Number of Refresher Programmes conducted</b>	<b>Total Number of Participants</b>		
	Male	Female	Total
<b>2000-2001 (07)</b>	90	124	<b>214</b>
<b>2001-2002 (06)</b>	115	95	<b>210</b>
<b>2002-2003 (07)</b>	114	187	<b>301</b>
<b>2003-2004 (02)</b>	46	50	<b>096</b>
<b>2004-2005 (06)</b>	132	72	<b>204</b>
<b>2005-2006 (04)</b>	91	76	<b>167</b>
<b>2006-2007 (04)</b>	70	52	<b>122</b>
<b>2007-2008 (03)</b>	51	52	<b>103</b>
<b>2008-2009 ( 02)</b>	46	41	<b>87</b>
Special summer School & Winter School			

equivalent of Refresher Course			
2009-2010 (1)	13	08	<b>21</b>
2010-2011(1)	12	08	<b>20</b>
2012-2013 (03)	53	10	<b>63</b>
2013-2014 (03)	35	18	<b>53</b>
2013-2014 (02)	29	27	<b>56</b>
Special summer School & Winter School equivalent of Refresher Course			
2014-15 Nil	-	-	-
2015-16 (02)	<b>73</b>	<b>34</b>	<b>107</b>

(c) Short term Programs/ Summer School conducted from inception to 31-03-2009

Total No.	Name of The Programme	Male Participants	Female Participants	Total Participants
<b>01</b>	SPECIAL SUMMER SCHOOL 2008-09	23	23	<b>46</b>
<b>01</b>	SPECIAL WINTER SCHOOL 2008-09	23	18	<b>41</b>
<b>01</b>	SPECIAL SUMMER SCHOOL 2013-14	19	22	<b>41</b>
<b>01</b>	SPECIAL WINTER SCHOOL 2013-14	07	09	<b>16</b>

5. (a) Information Regarding Orientation Programmes (Year-wise)

Year Plan	No. of the Programmes Conducted (Yearwise)	Number of participants					Number of Resource Persons		
		Male	Female	Local	Outstation	Total	Local	Outstation	Total
<b>IX</b>	2000-2001	23	32	23	32	55	<b>23</b>	<b>32</b>	<b>55</b>
	2001-2002	21	30	18	33	51	17	19	<b>36</b>
	Total=	44	62	41	65	106	40	51	<b>91</b>
<b>X</b>	2002-2003	22	21	13	30	43	33	11	<b>44</b>
	Total=	22	21	13	30	43	33	11	<b>44</b>
<b>XI</b>	2009-2010	14	06	-	20	20	12	21	<b>33</b>
	2010-2011 (I)	23	17	08	32	40	20	20	<b>40</b>
	2010-2011 (II)	23	08	00	31	31	17	14	<b>31</b>
	Total=	60	31	08	83	91	49	55	<b>104</b>
<b>XII</b>	2012-13 (1)	07	07	03	11	14	42	20	<b>62</b>
	Total=	07	07	03	11	14	42	20	<b>62</b>

5(b) Information Regarding Refresher Courses (Plan wise and Subject wise)

Year	Subject	Number of Courses	Total Number of Participants					Number of Resource Persons		
			Male	Female	Local	Outstation	Total	Local	Outstation	Total
Plan IX	HISTORY	02	24	20	8	36	44	Not Made Available By		

2001-02	BOTANY	02	21	32	10	43	53	Concerned A&F Section Where Earlier Records Have Been maintained					
	ECONOMICS	02	37	33	18	52	70						
	CHEMISTRY	02	45	26	13	58	71						
	ZOOLOGY	02	36	37	13	60	73						
	POL. SC.	02	42	44	17	69	86						
	HOME SC.	01	00	27	05	22	27						
X 2002-07	HISTORY	03	63	42	24	81	105						
	BOTANY	01	16	19	11	24	35						
	ECONOMICS	03	30	25	8	47	55						
	CHEMISTRY	03	52	51	29	74	103						
	ZOOLOGY	02	12	28	12	28	40						
	POL. SC.	03	50	53	26	77	103						
	ENV. SC.	05	111	117	93	135	228						
	COMMERCE	01	60	06	19	47	66						
	HOME SC.	03	18	23	5	36	41						
	CESBM MANAGEMENT	01 03	22 82	21 2	12 25	31 59	43 84						
XI 2007-08	CHEMISTRY	01	18	10	4	24	28	<b>05</b>	<b>23</b>	<b>28</b>			
	EDUCATIONAL MANAGEMENT	01	16	25	18	23	41	24	07	<b>31</b>			
	ENV. SC.	01	17	17	12	22	34	10	09	<b>19</b>			
2008-09	SPECIAL SUMMER SCHOOL	01	20	24	11	33	44	17	11	<b>28</b>			
	SPECIAL WINTER SCHOOL	01	23	18	17	24	41	13	16	<b>29</b>			
2009-10	MAJOR CONCERNS IN SOCIAL SCIENCE	01	08	13	-	21	21	09	19	<b>28</b>			
2010-11	POLITICAL SCIENCE	01	12	08	-	20	20	10	13	<b>23</b>			
2012-13	Entrepreneurship	01	20	01	01	20	21	26	16	<b>42</b>			
	Chemistry Education	01	15	04	01	18	19	15	11	<b>26</b>			
	Commerce	01	18	05	03	20	23	23	13	<b>39</b>			
2013-14	Special Winter School	01	10	06	02	14	16	18	24	<b>42</b>			
	Special Summer School	01	21	19	12	28	40	09	34	<b>43</b>			
	Life Science	01	14	05	01	18	19	09	10	<b>19</b>			
	Computer Science	01	13	03	08	08	16	19	21	<b>40</b>			
	Environmental Sc Winter School	01	12	04	02	14	16	12	26	<b>38</b>			

6. Number of Workshops/Seminars, etc conducted for Principals/Deans/Chairpersons etc. during the last Five Years. **ONE**

7. Other Programmes conducted during the last Five Years.

Year	Title of the Programme	Date/Duration of the Programme	Total Number of Participants		
			Male	Female	Total
2008-09	Workshop on Interactive Programme on Research-2009	12-03-2009 to 31-03-2009	12	09	<b>21</b>
2013-14	Workshop on Algae Cultivation & Biofuel Production	26-07-13 to 31-07-13	12	09	<b>21</b>

As approved by Advisory Committee of ASC following three Short term Courses were conducted in accordance with UGC letter dt. 01.04.09

S. No.	Name of Courses	Dated:	Local Participant	Out Station Participant	Total Participant
1.	Short Term Course on Training Program on Basics of Remote Sensing & Geo-informatics	15-03-10 To 17-03-10	07	18	25
2.	Short Term Course on Workshop on, "How to write a Ph.D. Thesis?"	22-03-10 to 23-03-10	09	20	29
3.	Short Term on Workshop on Interdisciplinary Teaching & Research	30-03-10 To 31-03-10	12	13	25

8. List of Research Studies/Research Projects undertaken by your Academic Staff College during the last Five Years,  
Studies in conformity with **UGC-ASC Guidelines are only taken up.**

9. Whether the Academic Staff College has conducted any:

Subject-wise need analysis of the catchment area institution:

Invariably all subjects are taught in Govt. & Private Colleges of the State

Impact Analysis of the training, if conducted.

**NO** (Can be possible only if proper Information is provided by the

a) Orientation Programmes:

Colleges since Govt. College

teachers are transferred from time to time even in a year.

10. Problems faced by ASC

S. No	Nature of Problem	Problem Solution
1.	Lack of Staff – Ministerial and Accounts Staff from the University	Part time/ Retired shall to be appointed.
2.	In Sufficient Academic Staff	Staff to be deputed from <b>University department</b> /affiliated College to ASC & not additional charge.
3.	As present TA/DA not to be U.G.C. norms.	In case additional charge is Director Orientation programme –Honorarium decide by UGC
4	Honorarium to the Resource Persons	Minimum 1000/- per Lecturer

11. Whether the ASC has constituted the Academic Advisory Committee.

**YES** .

12. Information regarding facilities at Academic Staff College.

S.No	Item	Yes/No
1.	Administrative Office	Yes
2.	Director's Room	Yes
3.	a. Lecture Hall (if yes, Specify No. of Halls with seating capacity)	University Halls (A) upto 80-90
	b. Whether class rooms are Air-conditioned	(C) upto 50

	(Yes)	
4.	Library facility (if yes, Number of Books)	Yes 262
5.	Hostel Accommodations	Guest House Constructed. Furnishing sufficient to be done availability of funds
6.	TV/VCR	No
7.	Computers	Yes In Computer Lab and in office
8.	Over Head Projector	Yes, Portable
9.	Multimedia Projector	Yes
10.	Slide Projector	No
11.	PA System	Yes
12.	Photo Copier	Yes
13.	Printers	Yes
14.	Video Recording Facility	Yes (Video Camera attached to EDUSAT facility)
15.	Computer Lab	Yes
16.	Edusat Facility	Yes

13. Information Regarding the Computer Centre/Lab:

a) Date of Commencement of its activities - 18.6.07

Used for training of participants of Refresher Course and Orientation Programme as per norms as well as for imparting Basic computer training to University Employees. Computer illiterate teacher participants become educated using this facility particularly with are MS-Word, MS-Power Point and can develop text document prepare and power pint slides on completion of course.

15. Do you grade the participants as per the UGC guidelines? **YES**

16. Financial Details:

1. a. Statement of Accounts showing the Grants Received from the UGC for conduct of Orientation and Refresher Courses Item wise: Participant Cost, books, salary, working expenses, equipment etc., from Inception to 31.03.09

YEAR wise	Grant received from UGC	Amount Spent					Total Expenditure (Year wise)
		Participant Cost	Books	Salary	Working Expenses	Equipment	
2000-01							<b>1071985</b>
2001-02	35,00,000						<b>1112132</b>
2002-03							<b>1020621</b>
2003-04							<b>338546</b>
2004-05	1000000						<b>867166</b>
2005-06							<b>679635</b>
2006-07	1500000						<b>613048</b>
2007-08							<b>425073</b>
2008-09	5000000	665039	96407	00	144189	98146	<b>1003781</b>
2012-13	40,00,000	7,57,108	35551	18000	1,25,066	60483	<b>9,96208</b>
2013-14	1,00,00,000	9,97,318	-----	24000	1,53,158	88,861	<b>12,63,337</b>

(b) ASC Guest House Grant Details:

ASC Guest House has been Constructed. It has 19 rooms – 09 on Ground Floor & 10 on First Floor. To every room is attached wash room with essential fittings & fixtures.

17. Kindly suggest issues to be discussed at the next Directors Meet on priority basis for the effective functioning of the UGC - ASCs.

- (a) Mechanism to Ensure timely nomination of participants of Govt. College Lectures by Office of Commissioner College Education well in advance before commencement of course at least a month before alongwith instructions to participants to confirm their participation to Director ASC.
- (b) To discuss the modalities of organizing follow up programmes to know the impact of the courses on the performance of the teacher participants in their respective college/ Institution.
- (c) Independent liability of ASC-
 

(i)	Professor –	Director (Independent)
(ii)	Associate Professor-	Dy-Director
(iii)	Assistant Professor-	Assistant Director

18. Unique features of the ASC's activities as reflected in participants feedback:

An overwhelming response is received from the participants when they give the feedback of the course in the Valedictory Session before the dias and which is recorded. They express immense appreciation and satisfaction on the way the course is conducted in this Academic Staff College with all seriousness, sincerity and strictly in confirmation to UGC –ASC Guidelines. Punctuality, regularity, discipline, responsiveness of participants, assessment exercises viz. presentations, objective test, holistic response ensured all through each course duration which keeps the participants truly involved in the course all through.

Eminent resource persons who are peers in different fields as reflected by the status held by them are invited from the State and outside the State to deliver lectures to the participants of the Refresher Courses, Orientation Programmes and Short term courses. Resource persons invited are of the stature of Vice-Chancellors, Directors, Deans, Professors, Head of Departments of University teaching departments, Senior IAS officers of the rank of Additional Chief Secretary of State, Chairman Revenue Board, Secretary RPSC, Former Member Revenue Board, Financial Advisor Revenue Board, Comptroller etc. as per requirement of the course and feedback of participants was obtained for each of the resource persons based on the record of which the above statements have been made.

The participants felt highly benefitted from the lectures and interacted with the resource persons to resolve their queries and doubts. Such outstanding personalities were invited only during the tenure of Dr. Rita Mehra as Director for which the participants expressed greatfulness. Perhaps hardly any Academic Staff College might have invited such dignitaries from different field including the Vice-Chancellors.

The participants were also happy to get training on Computers in Computer Lab, to get acquainted with Remote Sensing Technique in visit to Remote Sensing Department, to get acquainted with latest technique in teaching using Smart Board in Smart Classrooms in the MDS University Ajmer, to be acquainted with Interactive teaching and learning through Edusat Sit Facility, Yoga exercises for stress management in Yoga Department, Library Sessions in University Library and Academic Staff College Library for becoming updated with the recent updates in their subject as well as getting access to literary books of renowned authors on interdisciplinary topics.