

SELF STUDY REPORT

Executive Summary

Introduction:

Sona College of Technology, located in Salem City, Tamilnadu and established in 1997, is one of the fastest growing technical institutions in India and a leading engineering college in South India. Sona is situated in the heart of Salem City which is famous for steel manufacture, Magnesite mining, Handloom and Powerloom textiles, and mangoes! Sona is easily accessible from Salem Railway Station (1 km) and from the Main Bus Station (2 km). Sona has a great reputation as a provider of quality technical education. It offers a wide range of high quality education and training opportunities to a wide cross-section of students from across the country and abroad. Sona's sharp focus on quality education and training has turned it into a premier technical institution in a short span of twenty years. Sona is equipped with world class infrastructure and highly qualified and experienced faculty members. Sona stands tall as one of the best destinations for world class education. One will find the campus charming, the space very accommodating, the view wide and varied, and the pleasures refined. **Sona's Programmes:** Sona offers **seven UG and 14 PG programmes** as mainstream programmes. The UG programmes include the BE and BTech programmes in a variety of engineering disciplines and technology areas. The PG programmes include the MBA, MCA and ME/MTech programmes in emerging areas. Sona's academic programmes extend well beyond the theoretical realms into modern labs where the students get the advantage of hands-on training in current technological practices.

Vision:

Sona's Vision

To become an institute of great repute, in the fields of Science, Applied Science, Engineering, Technology and Management studies, by offering a full range of programmes of global standard to foster research, and to transform the students into globally competent personalities

Mission:

Sona's Mission

- To offer graduate, post-graduate, doctoral and other value-added programmes beneficial for the students
- To establish state-of-the-art facilities and resources required to achieve excellence in teaching-learning, and supplementary processes
- To provide Faculty and Staff with the required qualification and competence and to provide opportunity to upgrade their knowledge and skills
- To motivate the students to pursue higher education, appear for competitive exams, and other value added programmes for their holistic development
- To provide opportunity to the students and bring out their inherent talent
- To establish centres of excellence in the emerging areas of research
- To have regular interaction with the Industries in the area of R & D, and offer consultancy, training and testing services
- To offer continuing education, and non-formal vocational education programmes that are beneficial to the society

Institutional Strength :

Sona is strategically located in the heart of Salem city close to the rail and bus stations – it is the only such private college in Tamilnadu.

Of the 331 faculty in Sona College, 122 have PhD degrees, 90 are pursuing their doctorates, and at least one-third of the faculty in every department are doctorates.

Sona has 36 special-activity centres that focus exclusively on R&D, customised training for industry, learning resources development, in-house publications and so on.

Sona is one of the few colleges in India recognised as a SIRO by Department of Scientific and Industrial Research (DSIR).

Sona is a DST-FIST funded institute involved in interdisciplinary research in emerging areas of technology.

The management fully supports and encourages applied research activity in the college.

Regular visits by senior scientific and research persons from elite institutions and government R & D establishments are an impetus for enhancement of research.

Financial support is provided to faculty with dedication to research.

The college encourages new faculty with master's degree to register for their PhDs.

Sona has excellent infrastructure facilities for the overall development of faculty and students.

It has a conducive atmosphere for study, with a serene campus that is clean and attractively green.

Achiever students and those with good potential are given scholarships for studies and special funding support for overseas paper presentation or internship. The management strongly supports faculty members successfully completing NPTEL courses / MOOC or those presenting papers outside the college/country or those with high-calibre research and publications.

Institutional Weakness :

1. Sona College has a large enough campus, but being situated within city limits, it is constrained to grow only vertically hereafter with multi-storey structures.
2. Students would do better in placement with increased effort to enhance English communication skills, soft skills and aptitude.
3. A greater focus on high-quality publications on the part of faculty is desirable.
4. Teachers with less than five years' experience could gain from entering the research arena much earlier than they normally do.

Institutional Opportunity :

1. The presence of foreign students from a wide range of countries and those from other states of India has resulted in a happy cross-cultural experience for the staff and Tamil students alike.
2. Those who have been working as Principals, Directors or Deans elsewhere have joined Sona as professors and their experience is an advantage for Sona.
3. The Sona Management, being industrialists themselves and having headed leading industrial fora, have gained a vast connect with industry that has proven useful to the college's industry connect.
4. Sona campus has well trained and experienced faculty members who can act as trainers for soft skills and life skills.

5. The Alumni Association could do remarkably well by bringing about a stronger connect with the more experienced alumni such that all departments are increasingly benefitted.
6. A more aggressive drive is essential to have interaction with companies in the core areas especially in terms of MoUs, internship, placement and possibly collaborative research.

Institutional Challenge :

1. The declining standard of the school education-education system in recent years poses Sona with one of the biggest challenges to maintain its academic standards; Students with high cut off have limited knowledge. The communication skill of schools is low and extra effort has to be put by staff for this.
2. Variation in the fee structure given by Tamilnadu government compared to other states limits the funding.
3. Salem being a Tier-2 city, there are only a few industries that can employ our students and in general too the core companies and the MNCs also recruiting students in fewer numbers.
4. With an increasing number of doctorate staff, the salary overhead is high.
5. Because of the two-language formula in Tamil Nadu, the mobility of our students to other states for jobs is a challenge.
6. No qualifying standards like NEET are there for engineering admissions. In Tamilnadu counselling for admission is not properly synchronised due to delayed Governmental decisions. Thus, students joining engineering programmes leave them to join other programmes.

Criteria wise Summary

Curricular Aspects :

Sona has its own Vision, Mission and Quality Policy and is adopted Outcome based Education into practice. The Academic council and BOS meeting are organized every year to review existing curriculum. This involves participation from Industry Experts, Academic Peers, Alumni, Industry Experts, faculty members and students. After thorough discussion in the series of department subcommittee meetings, a draft is prepared by the department and presented to the BOS. They discuss the experiential learning, hands-on practical courses and currency and relevance of the programme being offered. The curriculum is revised as per the recommendations and suggestions given by the expert members of the BOS of different disciplines to meet the needs of industry, current research and societal requirements. Suggestions from the stakeholders are also taken and these are put for consideration at Academic Council level to take appropriate decision. Further, our industry tie-ups, alumni interactions and co-curricular activities make the students more competitive and industry ready. Aptitude and soft skills courses are offered to enhance the employability skills. Entrepreneurial skills and students interested in doing higher studies and preparing for Government services are also offered. The CBCS provides an academic flexibility by taking additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning. Yoga, Meditation, Personality Development, Environmental Engineering and Professional Ethics courses are included to promote value education and social citizenship roles. Cultural education is imparted by making students sensitive to our value system, traditions and culture by various events organized every year.

Teaching-learning and Evaluation :

Admission of students to all the UG and PG programs are based on the State Government rule, where applications are received through Tamil Nadu Engineering Admission and Management Consortium from all over Tamil Nadu. The ratio of average students to full-time teachers is 1:15. All the faculties are trained by Blackboard Learn and MOODLE. The lectures recorded through Lecture Capturing System can be accessed by the students for their better learning. Faculties help the students to handle stress related issues by proper mentoring system. Pre-planned academic schedules and teaching plans are followed. All the courses are handled by full-time teachers in accordance to the norms. The number of doctorates and experienced

faculties has been increasing every year to meet requirements of students. Faculties of every department have received various awards, recognitions and fellowships at State, National and International levels from Government and other recognized bodies. The office of the controller of examination has all necessary facilities such as computer and strong room. The entire division is 100% automated and uses Examination Management System. An adequate number of staff are employed to conduct the examination and publish the results. Final semester results are normally announced within one month from the corresponding end-semester examinations. Revaluation is conducted every semester, while supplementary examinations are conducted only during even semesters. Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed on the website and communicated to all the teachers and students.

Research, Innovations and Extension :

Sona College's has 36 centers for research, consultancy and training. Every department is encouraged to have at least one such center. The centers focus on applied research, product development, learning-resources development and industrial training. All these centers have in place advanced equipment and current technology. There is a strong tendency towards inter-discipline research, especially in the areas of nano-technology, robotics, automation, etc that generates new ideas and promotes the development of innovative products and processes. Our R&D centres have successfully completed many funded projects of ISRO, NIOT, DRDO, DST, AICTE, UGC, CPRI etc. Sona has developed successfully BLDC motors for ISRO space applications, also developed RPS and Drive Electronics for NIOT deep sea mining applications. We have completed 47 projects worth Rs 2.2 crores and 23 ongoing projects of worth 3.8 crores . Recently received Rs.3.6 Crore funding support from DST in the category of FIST, WTP, Agri-BPO, Women Scientist Schemes, Young Scientist Schemes. Sona is recognized as a SIRO by Department of Scientific & Industrial Research (DSIR), New Delhi, which brings more advantages for joint industrial consultancy and R&D works. SIRO recognition also enhanced the R&D activities of our institute in the area of scientific and industrial research and development of indigenous technology. Both the faculty and students alike contribute to the research, development and innovation at Sona. In order to encourage the faculty and students of Sona College of Technology in carrying out Consultancy Projects and testing services to industries, Management provides 60:40 sharing in the net revenue of such projects.

Infrastructure and Learning Resources :

Sona College of Technology, is spread over campus area of about 59509 m² that provides holistic learning experience for students. Institution accommodates 113 classrooms in addition to 13 newly constructed class rooms that equipped with the multimedia and video recording facility. 86 laboratories including 1 newly constructed lab equipped with advanced equipments with a total cost of 216.24 lakhs will facilitate experimental learning for the students beyond theoretical knowledge. Library with facilities like e-Books/Journals, CD/Vedio, Digital database NPTEL are added features in addition to huge volume of 87461 text/reference books that stands as proof of knowledge enrichment. The special feature of the library can be demonstrated with the aid of Autolib software. In order to provide single robust, secure and integrated system Moodle-A open source web application is used to create interactive online learning platform. As an added feather to enhance teaching learning process, black board learning software is utilized that will help to assess learning material and activities that happens through online. Timely updating in black board tools and other contents like evaluation of assignment with plagiarism check will ensure the proper functioning of academic network within the campus. In order to conduit the gap between industry and academia workshops are conducted in coordination with ICT Academy in a regular basis. Apart all, massive open online software MOOC is utilized to learn the online certification courses. With no doubt, aforementioned infrastructure and other learning tools will ensure effective learning process between students and staff community worth 3.8 crores.

Student Support and Progression :

Sona provides various scholarships like Merit scholarships, Merit cum Means scholarships, Sports scholarships and special scholarships to the students every year. The management scholarship amount ranges from 10 Lakhs to 35 lakhs every year. Apart from the management scholarships, students are also benefited by Government scholarships based on their community. We offer various number of capability enhancement and student development schemes to the students. It includes guidance for competitive examinations, career counseling, soft skill development, remedial coaching classes for weak students, and bridge courses for lateral entry students every year. Yoga and meditation is offered as part of their curriculum for their active life. Personal counseling is given to the students by a specially appointed counselor to offer solutions for their personal problems. An exclusive E-learning language lab is established to improve the communication skills of the students. Further, Sona has its own placement and training department for providing 100% job opportunity to the students from top most companies like ZOHIO, Amazon, Infosys and Accenture every year. In addition to the placement, students can also be benefited by higher education training and competitive exam training to qualify the GATE, GRE, TOFEL, Civil services and state government examinations. Sona students are motivated to participate in National / International events to show their outstanding performance in sports and cultural events. Alumni meetings are conducted every year through Alumni association to create a bond between college and our alumni. The alumni support the students by delivering guest lectures and conducting mock interviews.

Governance, Leadership and Management :

Sona has a vision to become an institute of great repute, in the fields of science, applied science, engineering, technology and management studies, by offering a full range of programmes of global standard to foster research and to transform the students into globally competent personalities. The governance of Sona College is headed by the members of the management consisting of the Chairman, the two Vice-Chairmen. The governing body also includes Directors, Principal, nominees of UGC, State Government, Anna University, experts from industry and faculties for the decision making of the institute. In our institute have practicing the decentralization in the fields like academics, administration, Research and Development, consultancy and the management dynamically participated and extend their support in terms of financial resources, infrastructure, etc. In order to modernize the undergraduate and postgraduate education system, the Learning Management System has been implemented successfully in our campus. The institute has various bodies and meet periodically for the overall development. The suggestion given by academic council members the new Regulations 2015 was implemented for all UG and PG programmes to introduce the Choice Based Credit System. The institute has the service rules for effective functioning of human resources and policies for professional development activities such as participation in seminars, conferences and publications. The management of the college follows an open system of administration and grievances from staff and students are given the utmost attention. For the financial management of the institute the Internal Audits and External Audits have been carried out regularly.

Institutional Values and Best Practices :

Sona college of Technology is known for its innovative steps in several domains like teaching methodology, research and development. It includes the establishment of centre of excellence with centre heads, introduction of choice based credit system, Total Quality Management (TQM) courses like Communication Skills, Technical Seminar Mandatory, conduction of Faculty Development Programmes, providing travel grant for faculty members for attending conferences, seminars, workshops etc, research fellowship and internal research fund for staff and students, adopting rain water harvesting methods, energy conservation steps, green computing and waste water recycling and maintaining the campus tobacco – free. One of the best practices of our college is the Management Information System (MIS) which is set to store and maintain the details of students such as attendance particulars, performance in tests etc. Information in the MIS can be retrieved at any point of time easily.

Profile**BASIC INFORMATION**

Name and Address of the College	
Name	Sona College Of Technology
Address	JUNCTION MAIN ROAD, SURAMANGALAM (P.O.), SALEM - 636 005
City	Salem
State	Tamil Nadu
Pin	636005
Website	www.sonatech.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Professor	G.M.KADHAR NAWAZ	0427-4099825	9894984898	0427-4099888	kadharnawaz@sonatech.ac.in
Principal	M. USHA	0427-4099999	9443366495	0427-4099888	iqac@sonatech.ac.in

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details

Date of Establishment, Prior to the Grant of 'Autonomy'		15-07-1997		
Date of grant of 'Autonomy' to the College by UGC		17-09-2010		
University to which the college is affiliated				
State	University name	Document		
Tamil Nadu	Anna University	View Document		
Details of UGC recognition				
Under Section		Date		
2f of UGC		25-06-2009		
12B of UGC		27-08-2010		
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-04-2017	12	
Recognitions				
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?		No		
Is the College recognized for its performance by any other governmental agency?		Yes		
If yes, name of the agency		Recognized as Scientific and Industrial Research organizations by DSIR New Delhi		
Date of recognition		18-11-2016		
Location and Area of Campus				
Campus Type	Address	Location *	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	JUNCTION MAIN ROAD, SURAMANGALAM (P.O.), SALEM - 636 005	Urban	17.58	59509

ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)

Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Mechanical Engineering	48	HIGHER SECONDARY	English	180	168
UG	BE,Electrical And Electronics Engineering	48	HIGHER SECONDARY	English	120	100
UG	BE,Electronics And Communication Engineeirng	48	HIGHER SECONDARY	English	180	137
UG	BE,Computer Science And Engineeirng	48	HIGHER SECONDARY	English	180	176
UG	BE,Civil Engineeirng	48	HIGHER SECONDARY	English	120	106
UG	BTech,Information Technology	48	HIGHER SECONDARY	English	120	101
UG	BTech,Fashion Technology	48	HIGHER SECONDARY	English	120	97
PG	ME,Computer Science And Engineeirng	24	BE OR BTECH	English	30	11
PG	Mtech,Information Technology	24	BE OR BTECH	English	18	6
PG	MBA,Master Of Business Administration	24	ANY UG IN ARTS SCIENCE ENGINEERING ARCHITECTURE	English	180	154
PG	MCA,Master Of Computer Applications	36	UG DEGREE IN COMPUTER SCIENCE OR APPLICATION WITH MATHS IN HIGHER SECONDARY	English	60	0
PG	ME,Engineering Design	24	BE OR BTECH	English	18	0
PG	ME,Product Design And Development	24	BE OR BTECH	English	18	7
PG	ME,Industrial Safety And Engineering	24	BE OR BTECH	English	24	14
PG	ME,Power Electronics And Drives	24	BE OR BTECH	English	18	6
PG	ME,Power Systems Engineering	24	BE OR BTECH	English	30	12
PG	ME,Communication Systems	24	BE OR BTECH	English	18	9
PG	ME,Vlsi Design	24	BE OR BTECH	English	30	10
PG	ME,Software Engineering	24	BE OR BTECH	English	18	0

PG	ME,Structural Engineering	24	BE OR BTECH	English	24	24
PG	ME,Construction Engineering And Management	24	BE OR BTECH	English	24	21

Position Details of Faculty & Staff in the College

Teaching Faculty

	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	44				65				241			
Recruited	26	13	0	39	33	20	0	53	135	104	0	239
Yet to Recruit	5				12				2			

Non-Teaching Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				128
Recruited	84	44	0	128
Yet to Recruit				0

Technical Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				87
Recruited	79	8	0	87
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	26	13	0	29	13	0	27	15	0	123
M.Phil.	0	0	0	0	1	0	6	16	0	23
PG	0	0	0	4	6	0	102	73	0	185

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?		Male	Female	Others
		7	1	0
				Total
				8

Provide the Following Details of Students Enrolled in the College During the Current Academic Year						
Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
PG	Male	134	2	0	9	145
	Female	128	1	0	0	129
	Others	0	0	0	0	0
UG	Male	504	20	0	15	539
	Female	338	5	0	3	346
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years				
Programme	Year 1	Year 2	Year 3	Year 4

SC	Male	307	310	285	278
	Female	220	221	234	214
	Others	0	0	0	0
ST	Male	15	13	12	9
	Female	4	4	4	4
	Others	0	0	0	0
OBC	Male	2142	2144	2143	2133
	Female	1679	1712	1746	1658
	Others	0	0	0	0
General	Male	342	295	249	212
	Female	180	159	150	144
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		4889	4858	4823	4652

EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineeirng	View Document
Communication Systems	View Document
Computer Science And Engineeirng	View Document
Construction Engineering And Management	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineeirng	View Document
Engineering Design	View Document
Fashion Technology	View Document
Industrial Safety And Engineering	View Document
Information Technology	View Document
Master Of Business Administration	View Document
Master Of Computer Applications	View Document
Mechanical Engineering	View Document
Power Electronics And Drives	View Document
Power Systems Engineering	View Document
Product Design And Development	View Document
Software Engineering	View Document
Structural Engineering	View Document
Vlsi Design	View Document

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1. Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution

Answer:

The curriculum is made vibrant by the involvement of the stakeholders and experts in the concerned field of studies. The revision and redesign of curriculum is based on recent developments and feedback from stakeholders. For Curriculum Development (CD), the institution follows a three-step approach. As the first step, the departments, store and assess the current status of the curriculum, feedback on its utility, performance and relevance (from students, parents, alumni, industries and peers). The suggestions received from stakeholders are reviewed by the Department Consultative Committee. Relevant and innovative suggestions related to the courses are considered for inclusion in the curriculum. The curriculum and syllabi are revised from time to time.

In the process of developing the curriculum, care is taken to ensure adherence to the norms and guidelines prescribed by the Anna University, AICTE and UGC. The institution conducts workshops/seminars on CD with experts from the Central and State Universities, Research Organizations, Industrialists, Scientists and other stakeholders as participants and Resource Persons. The final step is approval and implementation of CD.

Approval of the curriculum by the respective Board of Studies and Academic Council are mandatory. The new curriculum thus approved gets disseminated at different levels through circulars, notifications and awareness-creating workshops. The curriculum thus reaches its final shape. This curriculum is subject to annual review in the meetings of the Board of Studies.

Choice Based Credit System (CBCS) is offered in the curriculum to provide freedom to the students to select courses on their own interests. CBCS accelerates the teaching-learning process and enables vertical and horizontal mobility in learning. The CBCS provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning. The curriculum is enriched with research relevant contents as well. A framework of the curriculum is developed by the departments for their programmes. This system provides flexibility in designing curriculum and assigning credits, based on the course content and hours of teaching.

Typical Curriculum Structure for UG Engineering/Technology degree Programmes

Course Work - Subject Area	Range of Total Credits(%)	
	Min	Max
Humanities and Social Sciences (HS), including Management;	5	10
Basic Sciences(BS) including Mathematics, Physics and Chemistry;	15	20
Engineering Sciences (ES), including Materials, Workshop, Drawing, Basics of Electrical/Electronics/Mechanical/Computer Engineering, Instrumentation;	15	20
Professional Subjects-Core (PC), relevant to the chosen specialization/branch;	30	40
Professional Electives (PE), relevant to the chosen specialization/ branch;	10	15
Open Electives (OE), from other technical and/or emerging subject areas / disciplines;	5	10
Project Work, Seminar and/or Internship in Industry or elsewhere.	10	15

Thus, the list of courses, course outcomes, and evaluation pattern with weightages for the continuous internal assessment / semester-end assessment are defined. The institution takes care of social needs in the curriculum development. The following are included to improve the life style of the society.

- Environmental Science and Engineering
- Professional Ethics

The curriculum is reviewed in the discipline-wise Boards of Studies and the recommendations are tabled at the Academic Council meeting for approval.

1.1.2 Percentage of programs where syllabus revision was carried out during the last five years

Answer: 95.24

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Answer: 20

File Description	Document
Details of program syllabus revision in last 5 years	View Document
Minutes of relevant Academic Council/BOS meeting	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development

Answer: 15.88

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
58	214	205	54	80

File Description	Document
Program/ Curriculum/ Syllabus of the courses	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years

Answer: 8.52

1.2.1.1 How many new courses are introduced within the last five years

Answer: 325

File Description	Document
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Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Answer: 100

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

Answer: 21

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Answer:

The institution makes efforts to integrate socially relevant issues into the curriculum with the help of courses. Across all branches of Engineering, Professional Ethics, Human Values and Environmental Sciences are offered as mandatory courses in the curriculum which focuses on gender issues, managerial values and ethics, legal aspects, global warming and ecological issues to sensitize the students on climate change and generate ecological concern. The curriculum has one credit courses like Personality and career Enhancement, Soft skills and Aptitude and Yoga. The institution conducted seminars which reflected on human rights, environmental sustainability (renewable sources of energy), waste and E-waste management. In addition, by participated and organized co-curricular activities through various institutional clubs like Placement and training cell, Tremors club, Dexter's club, NSS, NCC, YRC and RRC. The departmental associations also play a vital role in these ventures. These courses and activities help in student's character development, improve communication, leadership skills and environmental consciousness.

In the College, NCC, NSS and YRC students are encouraged to go for rural camps and motivate the rural people about their education and personal development. Further, a student is sensitized to the prevailing situation in a country by giving them opportunity of seeing nearby organizations where people from weaker sections of societies are given necessary services. On the whole, the College strives to ensure that not only technocrat is developed but a complete human being with good civic sense and healthy mind is developed. A strong youth of today is going to be partner to the development of India's future.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document

1.3.2 Number of value-added courses imparting transferable and life skills offered during the last five years

Answer: 121

1.3.2.1 How many new value-added courses are added within the last 5 years

Answer: 121

File Description	Document
List of value added courses	View Document
Brochure or any other document relating to value added courses	View Document

1.3.3 Average percentage of students enrolled in the courses under 1.3.2 above

Answer: 16.19

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
976	830	881	627	573

File Description	Document
List of students enrolled	View Document

1.3.4 Percentage of students undertaking field projects / internships

Answer: 40.29

1.3.4.1 Number of students undertaking field projects or internships

Answer: 1808

File Description	Document
List of programs and number of students undertaking field projects / internships	View Document

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents for design and review of syllabus Semester wise /year wise

Answer: A. Any 4 of above

File Description	Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
Any additional information	View Document

1.4.2 Feedback processes of the institution may be classified as follows:

Answer: B. Feedback collected, analysed and action has been taken

File Description	Document
Any additional information	View Document

2.Teaching-learning and Evaluation**2.1 Student Enrolment and Profile****2.1.1 Average percentage of students from other States and Countries during the last five years****Answer:** 3.59

2.1.1.1 Number of students from other states and countries year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
90	130	180	242	227

File Description	Document
List of students (other states and countries)	View Document
Institutional data in prescribed format	View Document

2.1.2 Demand Ratio(Average of last five years)**Answer:** 0.85

2.1.2.1 Number of seats available year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1530	1530	1410	1338	1338

File Description	Document
Demand Ratio (Average of Last five years)	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years**Answer:** 70.69

2.1.3.1 Number of actual students admitted from the reserved categories year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1365	1321	1264	1234	1364

File Description	Document
Average percentage of seats filled against seats reserved	View Document

2.2 Catering to Student Diversity**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners****Answer:**

Methods to assess the learning level of the students

Advanced learners and slow learners are identified by class counsellors and faculty advisors based on the students

- Active participation in the classes.
- Continuous Internal Evaluation test performance and Semester End Examination results
- Performance in Co-curricular, Extra-curricular activities
- Performance in Projects, Trainings, etc.
- Participation in the Inter and Intra college level competitions
- Parents feedback at the Parents-Teachers meetings

Special programmes for Advanced Learners

The advanced learners are motivated to participate in various training and competitions. The advanced learners are,

- Encouraged to participate in different levels of co-curricular and extra-curricular activities
- Given opportunities to go for industrial training and internships in various companies to have hands-on training in their area of interests and to take-up real-time projects.
- Asked to involve in peer teaching and presentations for fellow students.
- Encouraged to participate in National level technical competitions
- Encouraged to appear for national level competitive exams
- Trained advanced through skill enhancement training, technical workshop, additional courses, etc.
- Instructed to take up online certification courses in advanced areas to inculcate their interest towards research
- Encouraged to do research projects in their areas of interest in association with R&D centres of the institution.
- Motivated to exhibit their projects in various events like Project expo, hackathon, etc.
- Motivated to participate in national conferences and seminars
- Advised to publish their research work as papers in reputed peer reviewed/refereed journals

Guidance to Slow Learners

The slow learners are encouraged to improve their knowledge and skills through special trainings.

- The slow learner's attendance is monitored to ensure their regularity.
- Remedial classes are conducted to overcome their deficiencies.
- Additional coaching classes and special coaching for mathematical courses are conducted.
- Bridge courses are conducted for lateral entry students.
- Tutorial classes for analytical and problematic courses are conducted; the teachers can devote more time for slow learners to help them overcome learning challenges.
- Help is rendered by peer teachers to understand the courses better
- Additional course materials and question banks are provided
- Extra coaching is given to students through Lecture Capturing System and Blackboard software. This helps the slow learners to view the lectures of the respective courses when they need it.
- Additional knowledge is provided through guest lectures
- Personal counselling is given for students to help them sort out their problems related to learning.
- Interactions with parents and their feedback help in counselling the students effectively
- Various clubs in the institution and training cell help to improve their confidence, communication, and other related soft skills
- Alumni meets are organised, and the students are benefitted by interacting with their alumni and they get their guidance and support for their career.

2.2.2 Student - Full time teacher ratio**Answer:** 13.01

File Description	Document
Institutional data in prescribed format	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls**Answer:** 0.27**2.2.3.1 Number of differently abled students on rolls****Answer:** 12

File Description	Document
Institutional data in prescribed format	View Document
List of students(differently abled)	View Document

2.3 Teaching- learning Process**2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences****Answer:**

The college follows various student centric methods for an effective implementation of the teaching learning process.

In the teaching and learning process, the lectures delivered by the faculty is supported by set of teaching aids and teaching methods that include

(1). Teaching Aids:

- Power point presentation, Video Film, Models, Charts, Animation

(2). Teaching Methods:

- Lecture
- Group Discussion
- Seminar
- Quiz
- Team Teaching
- Demonstration
- Drill and Practice
- Industrial Visit
- Games
- Role Play

Project:

Projects help to assess the

(3). Online Learning Resources:

Students are given exposure and access to online learning resources for various courses using the following national educational portal. They are:

- **National Programme on Technology Enhanced Learning (NPTEL)**

NPTEL provides E-learning through online Web and Video courses in Engineering, Science and Humanities streams. The mission of the NPTEL is to enhance the quality of Engineering education in the country by providing **free online courseware**. <http://nptel.iitm.ac.in/>

- **Anna EduSat Programme**

The Centre for Faculty Development of Anna University – Chennai, conducts the ANNA EDUSAT live interactive audio-video lecture programmes transmitted through KU-Band provided by ISRO, Bangalore, from January 2006 onwards.

URL: <http://www.annauniv.edu/facultydevelopment/edusat.html>

(4). Content beyond the Syllabus

- The faculty who is teaching a course must identify the important and latest topics that are not covered in the syllabus.
- Through each theory course, the students' knowledge get enriched by learning the advanced concepts in the subjects that are not covered in the syllabus.

(5). Utilization of Moodle and Black Board Software

Course plans, Assignments, Quizzes and course materials like PPTs, videos, documents are published either in Moodle or in Black board software for all the courses so that all the students can access the course content whenever they need.

(6). MOOC courses for the faculty

- Each faculty must complete any MOOC course in their areas of specialization or in the subjects they are going to teach in the current semester.
- It enables the faculty to enhance their skills in the specified subject area and in turn they can enhance the skill of the students.

(7). SMART class room

- Faculties use smart class rooms with ICT facility for delivering the lectures efficiently and effectively.
- Lecture Capture System is an automated audio-video recording solution for class room lectures. It provides access to classroom video lectures and activities online. Students can access the recorded video lectures and other materials from anywhere through laptops, tablets and Android platform by using URL: a.impartus.com.

(8). Invited Lectures

For each courses, apart from the regular lecture, the faculty should interact with the industry experts to deliver the lecture to the students based on the industry standards.

(9). Integrated Courses

- Lab integrated theory courses and theory integrated lab courses are included in the curriculum to enhance the students' application oriented knowledge.
- Through this methodology, students can solve or create solution to real time problems and their thinking skill can also be improved.

(10). On line live video lecture

For problematic courses, online live video lectures are conducted for students to understand the subjects easily and to update their knowledge and skill in that particular area.

(11). Employability Enhancement Courses in Curriculum.

More emphasis is given to Employability Enhancement courses in the college Autonomous curriculum. These courses include Industrial Training, Internships, Online Courses and Industry oriented courses. Every department of the college has a Departmental Consultative Committee (DCC) consisting of the HOD as Chairperson and five senior faculties, who are Professors or Associate Professors. The role of the DCC is to review and approve the industries or other organizations identified for industrial training, internship or project work of students. It shall also review and approve the content and quality of the online/elective courses selected by students. These courses will enhance the technical competency of the students for better placements in reputed companies.

File Description	Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Answer: 95.94

2.3.2.1 Number of teachers using ICT

Answer: 331

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Answer: 13.56

2.3.3.1 Number of mentors

Answer: 331

File Description	Document
Year wise list of number of students, full time teachers and mentor/mentee ratio	View Document

2.3.4 Preparation and adherence to Academic Calendar and Teaching plans by the institution

Answer:

Academic calendar includes the details of the following:

- Vision, mission and quality policy of the college
- Recent milestones achieved

- Academic schedule
- Research and training centres
- Instructional facility and amenity centres
- Women empowerment and security
- Anti-ragging committee information
- Grievance redressal cell
- Student counselling and availability of student counsellor
- NCC and NSS activities
- Working hours, rules and regulations and dress code for the students
- Department-wise technical activities
- College level club activities
- College level functions

Academic schedule is prepared by the Member Secretary, Academic Council with the consent of the Controller of Examinations. Commencement of the classes and last working days of the semester, internal and end semester examinations (both theory and practical) will be given in the schedule.

Course delivery plan is prepared for the semester and forwarded to the HoD concerned for approval. It is also uploaded in the blackboard software. Details of the research centres, training centres and activities at the college and department level are prepared by research heads, training heads and heads of the departments respectively. The list of holidays is also prepared and forwarded to the principal. Approval from the principal is got and published in the college website. The staff and students are also given a copy of the academic schedule.

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Answer: 100

File Description	Document
List of the faculty members authenticated by the Head of HEI	View Document
Year wise full time teachers and sanctioned posts for 5 years	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Answer: 20.73

2.4.2.1 Number of full time teachers with Ph.D. year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
93	86	69	46	42

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience of full time teachers in number of years

Answer: 11.21

2.4.3.1 Total experience of full-time teachers

Answer: 3869

File Description	Document
List of Teachers including their PAN, designation,dept and experience details	View Document

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Answer: 10.35

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
38	35	26	27	40

File Description	Document
e-copies of award letters (scanned or soft copy)	View Document
Institutional data in prescribed format	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Answer: 1.75

2.4.5.1 Number of full time teachers from other states year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
6	4	6	6	6

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years

Answer: 22.4

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
19	17	28	17	31

File Description	Document
List of programs and date of last semester and date of declaration of result	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Answer: 0

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Number of complaints and total number of students appeared year wise	View Document

2.5.3 Average percentage of applications for revaluation leading to change in marks

Answer: 17.26

2.5.3.1 Number of applications for revaluation leading to change in marks year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
468	284	383	319	587

File Description	Document
Year wise number of applications, students and revaluation cases	View Document

2.5.4 Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system

Answer:

Examination Procedure

1. Getting database of curriculum and syllabi of all UG/PG courses from the Academic Council member secretary.
2. Collecting database of Electives (both Professional and Open Electives) from the corresponding departments for the current semester.
3. Ensuring students attendance by collecting the list of students who lack attendance, who are debarred and who have withdrawn from the corresponding departments.

4. Preparing Time table, hall and seating plan for Continuous Internal Evaluation (CIE).
5. Conducting CIE tests which include collection of question Papers (QP) from departments, printing and disseminating.
6. Conducting of Semester End Examinations (SEE) for Practicals by collecting schedules from the departments and appointing external examiners.
7. Appointing QP setters and sending QP pattern with syllabi and instructions to the setters. The ratio of QP setters is 2: 1 ratio (External : Internal)
8. Scrutinizing the QPs by QP scrutiny committee members.
9. Conducting Semester End Examinations – Theory by preparing time table, Hall and seating plan and list of hall invigilators. It includes appointment of Chief Superintendent (CS) and Squad for the smooth conduct of examinations.
10. Conducting Central valuation for SEE by appointing Chairman, Chief Examiner, Internal and External examiners. The ratio of external examiner: internal examiner is 1:1.
11. Conducting Result Passing Board meeting before the publication of results.
12. Conducting Re-valuation and review revaluation every semester.
13. Conducting Supplementary Examinations only during the even semester for the current semester courses.

File Description	Document
Any additional information	View Document

2.5.5 Status of automation of Examination division along with approved Examination Manual

Answer: A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Answer:

The Program Specific Outcomes are published in the following:

- **Department website**
- **College website**
- **Curriculum / syllabus books**
- **Display boards**

Additionally, the dissemination of Program Specific Outcomes to all the stakeholders of the programme is done through student awareness / induction programmes, faculty meetings and parents meeting.

The Programme Outcomes are published in the following:

- **Department website**
- **College website**
- **Curriculum / syllabus books**
- **Display boards**

The Course Outcomes are published in the following:

- **Department website***
- **College website** <http://www.sonatech.ac.in/>
- **Curriculum / syllabus books**
- **Students lab manual**
- **Blackboard software**

The Program Specific Outcomes and Programme outcomes are published in the

- **Department website***
- **College website** <http://www.sonatech.ac.in/>

In addition to the above, the Course Outcomes are published in the

- **Curriculum / syllabus books**
- **Students lab manual**
- **Blackboard software**

* Department website links

Mechanical Engineering - <http://www.sonatech.ac.in/mech/>

Electrical and Electronics Engineering - <http://www.sonatech.ac.in/eee/>

Electronics and Communication Engineering - <http://www.sonatech.ac.in/ece/>

Computer Science and Engineering - <http://www.sonatech.ac.in/cse/>

Information Technology - <http://www.sonatech.ac.in/it/>

Civil Engineering - <http://www.sonatech.ac.in/civil/>

Fashion Technology - <http://www.sonatech.ac.in/ft/>

Master of Computer Applications - <http://www.sonatech.ac.in/mca/>

File Description	Document
COs for all courses (exemplars from Glossary)	View Document
Link for Additional Information	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Answer:

The attainment of course outcomes (COs), programme outcomes (POs) and program specific outcomes (PSOs) of all programmes are evaluated by the institution periodically. The course outcomes are evaluated

at the end of each semester and the POs and PSOs are evaluated every year.

For COs evaluation, the mean value of marks scored by students under each of the COs is expressed as a percentage and this parameter is used as a measure of achievement for the COs of each course semester-wise. This parameter is compared with a benchmark set by the college for achievement of the COs for the course.

For POs & PSOs evaluation, individual departments will compute the achievement of individual POs & PSOs for that particular programme, taking into account all the COs across the curriculum that are aligned with each of the POs & PSOs along with the individual strengths of the alignment. Benchmarks are also set for the achievement of POs to determine whether they have been achieved or not.

The above outcomes are measured by direct and indirect assessment tools given below:

(1). Direct Assessment Tools

For Theory courses,

- Continuous Internal Evaluation (CIE) tests, Assignments and Seminar.
- Semester End Examination (SEE)

For Practical courses

- Observation and Record work of experiments
- Continuous Internal Evaluation tests, Quizzes, Real Time Problem Solving.
- Viva Voce and Semester End Examination.

Employability Enhancement Courses

- Soft skills and Aptitude
- Mini Project/ Project review and presentation.
- Industrial training / Technical Seminar
- Internships.

(2). Indirect Assessment Tools

- Course end survey (for COs evaluation)
- Programme Exit survey (for POs & PSOs evaluation)
- Alumni survey (for POs & PSOs evaluation)
- Employer Survey (for POs & PSOs evaluation)

All the COs are mapped with the respective POs with high, medium and low correlation. The mapped analysis illustrates the extent to which each of the program outcome is attained. If all COs, POs and PSOs are well achieved, the graduate attributes would, be achieved and the programme will then be considered have achieved a major success.

File Description	Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Answer: 96.07

2.6.3.1 Total number of final year students who passed the university examination

Answer: 1321

2.6.3.2 Total number of final year students who appeared for the examination

Answer: 1375

File Description	Document
List of programs and number of students passed and appeared in the final year examination	View Document
Link for annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Answer:

File Description	Document
Database of all currently enrolled students	View Document

3. Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

Answer: Yes

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year)

Answer: 24.8

3.1.2.1 The amount of seed money provided by institution to its faculty year wise during the last five years(INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
63	31	5	3	22

File Description	Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
List of teachers receiving grant and details of grant received	View Document

3.1.3 Number of teachers awarded international fellowship for advanced studies/ research during the last five years

Answer: 2

3.1.3.1 The number of teachers awarded international fellowship for advanced studies / research year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1	0	0	1	0

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers.	View Document

3.1.4 Institution has the following facilities

1. Central Instrumentation Centre
2. Animal House/Green House / Museum
3. Central Fabrication facility
4. Media laboratory/Business Lab/Studios
5. Research / Statistical Databases

Answer: A. Any four facilities exist

File Description	Document
Any additional information	View Document
Link to videos and photographs geotagged	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years(INR in lakhs)

Answer: 423.52

3.2.1.1 Total Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year wise during the last five years(INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
241.8	102.72	40.85	23.6	14.55

File Description	Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
List of project and grant details	View Document

3.2.2 Number of research centres recognised by University and National/ International Bodies**Answer: 12****3.2.2.1 Number of research centres recognised by University and National/ International Bodies**

Answer: 12

File Description	Document
Names of research centres	View Document
Any additional information	View Document

3.2.3 Percentage of teachers recognised as research guides**Answer: 20****3.2.3.1 Number of teachers recognised as research guides**

Answer: 69

File Description	Document
Details of teachers recognized as research guide	View Document
Any additional information	View Document

3.2.4 Average number of research projects per teacher funded by government and non-government agencies during the last five years**Answer: 0.03****3.2.4.1 Number of research projects funded by government and non-government agencies during the last five years**

Answer: 44

File Description	Document
List of research projects and funding details	View Document
Supporting document from Funding Agency	View Document
link to funding agency website	View Document

3.3 Innovation Ecosystem**3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge****Answer:****Sona Business Incubation Center (SBIC)****1. Objectives:**

The basic objective is to establish business incubator as a tool for Entrepreneurship development and enhancement, which enables establishing new enterprises, creating new job positions, as well as developing new ideas and technologies. To stimulate entrepreneurial spirit among the young engineering

minds, to innovate and to contribute to the local economy, through job generation and to transfer the knowledge and IP from our college / university to leverage into a profitable product.

2. About SBIC:

The area of our incubation center is 11,000 square feet with comfortable computer rooms (staff rooms) including net facilities.

Funded by MSME, New Delhi.

66.50 lakhs / 10 projects

Infrastructure facilities include:

- a. Separate Telephone line, Fax/Modem and Internet Facility
- b. Computers and Printers
- c. Reprographic facilities
- d. Cubicle, furniture, Systems
- e. Library

3. Operations Parameter:

Different types of incubators provide different services, depending on the needs and the problems faced by local businesses. The key elements are the provision of an environment where business can start their work quickly and can expand their operations rapidly. This is achieved by providing the following services:

- a) Provision of workspace and lowered rents on flexible terms, allowing the business to pay monthly rent and with the flexibility to move to larger or smaller units within the incubator as and when required.
- b) Provision of business advice and support services ranging from Business planning, market advice, accountancy, legal and registration support
- c) Provision of common facilities (conference rooms, restrooms, reception areas), staff (reception staff), and equipment (conference equipment, photo copiers, fax machines)
- d) Provision of utility services (telephone, water, gas, drainage) at affordable rates and without high initial connection fees.

Following incubatees are working in our incubation center.

1. Mr. B.Jayavel - Ambulance Emergency Signal(AES) Control 4th Signal
2. Ms. S.Gomathi - Polymer Products (Silicon rubber kitchen equipments, to save oil usage while cooking)
3. Mr.S.Karthikeyan - Water Producer from air.

4. The operation of the BUSINESS INCUBATOR shall be governed by the Managing Committee which will be constituted with the approval of the Board of Governors (BOG) of the Host institution and comprise at least the following:

- a) Executive Head of the BUSINESS INCUBATOR (Ex-officio Chairperson).
- b) One representative of the Government of India's promoter agency, in the present case, the representative of O/o the DC (MSME), New Delhi (Member).
- c) One representative of the industry/industry association (Member).
- d) One representative of the financial institutions (Member).
- e) One representative from the academic community of the Host Institution (Member).
- f) One R&D expert (Member).
- g) BUSINESS INCUBATOR CEO/Manager (Member-Secretary).

File Description	Document

[link for additional information](#)
[View Document](#)

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices during the last five years

Answer: 229

3.3.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
49	72	29	47	32

File Description	Document
Report of the event	View Document
List of workshops/seminars during the last 5 years	View Document

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

Answer: 76

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
30	17	9	10	10

File Description	Document
List of innovation and award details	View Document
e- copies of award letters	View Document

3.3.4 Number of start-ups incubated on campus during the last five years

Answer: 3

3.3.4.1 Total number of start-ups incubated on campus year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
0	1	2	0	0

File Description	Document
List of startups details like name of startup, nature, year of commencement etc	View Document
Any additional information	View Document

3.4 Research Publications and Awards**3.4.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research****Answer:** Yes

File Description	Document
Institutional data in prescribed format	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognition/awards**Answer:** Yes

File Description	Document
List of Awardees and Award details	View Document
Any additional information	View Document

3.4.3 Number of Patents published/awarded during the last five years**Answer:** 18**3.4.3.1 Total number of Patents published/awarded year wise during the last five years****Answer:**

2016-17	2015-16	2014-15	2013-14	2012-13
3	4	7	1	3

File Description	Document
Any additional information	View Document
List of patents and year it was awarded	View Document

3.4.4 Number of Ph.D.s awarded per teacher during the last five years**Answer:** 1.42**3.4.4.1 How many Ph.Ds are awarded within last 5 years****Answer:** 98

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document
URL to the research page on HEI web site	View Document

3.4.5 Number of research papers per teacher in the Journals notified on UGC website during the last five years**Answer:** 0.51**3.4.5.1 Number of research papers in the Journals notified on UGC website during the last five years**

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
240	221	165	95	112

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.4.6 Number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings per teacher during the last five years

Answer: 0.49

3.4.6.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
157	120	161	190	148

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.7 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Answer: 2.82

3.4.7.1 Total number of citations received by publications in the last 5 years, which are included in online databases such as SCOPUS, web of science or PubMed/ Indian Citation Index

Answer: 1953

File Description	Document
Any additional information	View Document
BiblioMetrics of the publications during the last five years	View Document

3.4.8 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Answer: 31.5

3.4.8.1 Number of citations received by individual research publications in the last 5 years

Answer: 1953

3.4.8.2 Number of publications receiving proportionately maximum number of citation in the last five years

Answer: 62

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual

Answer: Yes

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to Consultancy policy	View Document
URL of the consultancy policy document	View Document

3.5.2 Revenue generated from consultancy during the last five years

Answer: 184.79

3.5.2.1 Total amount generated from consultancy year wise during the last five years (INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
83.03	68.8	3	9.32	20.64

File Description	Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document
List of consultants and revenue generated by them	View Document

3.5.3 Revenue generated from corporate training by the institution during the last five years

Answer: 23.22

3.5.3.1 Total amount generated from corporate training by the institution year wise during the last five years (INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
12.34	1.28	3.70	3.45	2.45

File Description	Document
List of teacher consultants and revenue generated by them	View Document
Audited statements of account indicating the revenue generated through training	View Document

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Answer:

3.6.1 Extension activities

Extension activities in the neighborhood community in terms of impact and sensitizing students to social issues and holistic development during the last five years

Sona College of Technology, one of the top ranking engineering colleges in India, has achieved global identity through its involvement in social issues and successful completion of projects and products. Sona is the best destination for engineering aspirants. Institution makes commendable contributions towards the development and upliftment of the people in the neighbouring community. These services have made indelible marks in the lives of the common people. Sona stands tall as one of the best institutions which involve itself in offering services to the public through its extension services. For instance, celebration of International Yoga Day created awareness among the people about health consciousness and the asanas taught were found to be useful by the community to maintain mental peace and health. Involvement of students in these initiatives help them in a great way in developing their interest for the development of the society.

Sona is training the people of Kantharkula Manickam, Salem District, under Women Technology Park project by offering the following training programmes:

1. Pulse plating for Silver anklet industry,
2. Manufacturing of Paver blocks using steel slag
3. Solar food processing (Manufacture of raisins, Tomato sauce, Greens powder)
4. Paper and printing technologies (Preparation of paper using recycling of waste paper, preparation of notebooks, training in Hightech printing services) and
5. Usage of sewing machine by disabled women

The adoption of the village, Kantharkula Manickam, is a milestone worth mentioning in the success story of the institute.

Sona helps people by donating blood and conducting polio camps in and around Salem. The extension activities for the welfare of the neighbourhood are Blood Donation Awareness Rally, Clean India, International Yoga Day, Rotary Club's Blood Donation Camp, Digital Transaction, Army Attachment Camp, Swatcha Bharat Abhiyan, Awareness on AIDS, HIV And ART (Anti Retroviral Therapy), Orphanage Visit, Child Awareness Seminar, Road Safety Patrol, Cardiac Camp, Blood Donation Seminar, Cuddalore Mission, Polio Camp, Drug Awareness, Eye Medical Camp, Diabetic Screening Camp, Anti Alcohol Awareness Programme, Tree Planting, TB Awareness-Seminar, Pond Cleaning, UNICEF & ICPP(Integrated Child Protection Programme), Visit to Blind School, Visit to Government Deaf and Dumb School, Visit to Karunya Illam, Workshop on Disaster Management, Measles Rupella Vaccine Camp, Awareness Seminar Organic Farming, Seminar on Environmental Issue, Cancer awareness rally, Integrity Day Celebration, Glaucoma, Seminar on Democracy and Electoral Participation.

File Description	Document
link for additional information	View Document

3.6.2 Number of awards and recognitions received for extension activities from Government /recognised bodies during the last five years

Answer: 48

3.6.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
23	14	3	3	5

File Description	Document
e-copy of the award letters	View Document
Number of awards for extension activities in last 5 years	View Document

3.6.3 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., during the last five years

Answer: 281

3.6.3.1 Number of extension and outreach programs conducted in collaboration with industry,community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc.,year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
53	53	52	61	62

File Description	Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document
Reports of the event organized	View Document

3.6.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Answer: 36.98

3.6.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
2141	1458	1667	2565	1063

File Description	Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	View Document
Report of the event	View Document

3.7 Collaboration**3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year****Answer: 4.4**

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
6	7	3	2	4

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	View Document

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years**Answer: 381**

3.7.2.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
124	182	28	22	25

File Description	Document
Details of linkages with institutions/industries for internship	View Document
e-copies of linkage related Document	View Document

3.7.3 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the last five years*(only functional MoUs with ongoing activities to be considered)***Answer: 32**

3.7.3.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
7	10	4	5	6

File Description	Document
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Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years	View Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document

4. Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc

Answer:

The college is keen to create infrastructure on par with the standards and norms of AICTE with respect to human resources (Faculty, Technical and Administrative Staff), laboratory equipment, built-up place, learning resources, (print and electronic and teaching learning aids). Whenever intake is upgraded and new courses are introduced, institution creates additional facilities.

The infrastructure requirements are planned accordingly.

1. To plan for classrooms as per the requirements.
2. To establish laboratory as per the syllabus.
3. To have seminar halls and board rooms.
4. To provide amenities like canteen, transport, playground etc.
5. To establish classrooms and laboratories for newly sanctioned departments.
6. To include infrastructure to accommodate the increase in student strength in the existing departments.
7. To purchase books for central library and departmental library to meet the requirements.

Optimal utilization

By constant monitoring and encouraging the staff and student, it is ensured that the facilities are very well utilized.

The college has a policy for creation and enhancement of infrastructure.

Recent initiative

1. Recently we have introduced lecture capture system (lectures are videographed) in considerable number of class rooms covering all departments.
2. The students can download the videos and learn leisurely.
3. Recently a exclusive block for MCA discipline has been constructed and it is being utilized. It is a GREEN Building (5 – star status) certified by GRIHA.
4. The CSE-IT block is being provided with an additional floor (4th floor) - construction works are in progress.

5. We are going to construct soon a new building/block as University Block with a museum, library, seminar hall, board room, CoE- office, Principal and Director chambers, etc. It is a G+6 building.

We have 85 well-furnished laboratories. A laboratory is a facility that provides controlled conditions in which [scientific](#) or technological research, [experiments](#), and [measurement](#) may be performed.

The College provides all departments with facilities like office room, common room, separate rest rooms for women students and staff.

The details are presented below.

Sl.No	Department	Office Room (No.)	Common Room (No.)	Restroom for women students (No.)	Restroom For Staff (No.)
1.	Civil	1	-	4	-
2.	Mechanical	1	2	2	24 (G+L)
3.	EEE	1	1	2 Common	-
4.	ECE	1	1	4	-
5.	CSE	1	-	2	-
6.	IT	1	-	2	-
7.	FT	1	-	2	-
8.	Science and Humanities	1	1	3	2 (G + L)
9.	MBA	1	1	3	3
10	MCA (Green building)	2	2 (B & G)	3	6 (G +L)

To ease the hardship endured by disabled students and staff,

We have provided rest rooms with special arrangements in every block for the exclusive use of disabled persons.

Furthermore, if there are too many steps to reach a block, gently sloping ramps with side handrails have been provided.

For disabled students the class rooms/exam halls are shifted to ground floor; wheel chairs are employed to conduct and used for disabled students/staff.

The college has excellent computing facilities. The details of the college's computing facilities (hardware and software)

- Number of system with configuration**

Name of the Laboratory	Qty	Configuration
Apple Lab	13	IMAC Specification Model Name: IMac Model Identifier: : IMac16.1 Processor Name: Intel core I5 Processor speed: 1.6GHz

		Number of Processors:1 Total Number of cores:2 L2 Cache(per core):256 KB L3 Cache:3 MB Memory:8GB
	20	Mac Mini Specification Model Name: Mac Mini Model Identifier: Mac Mini 7.1 Processor Name: Intel core I5 Processor speed: 1.4 GHz Number of Processors: 1 Total Number of cores: 2 L2 Cache(per core): 256 KB L3 Cache: 3 MB Memory: 8GB
LAB-I	1	HP PROLIANT BL280C G6 (BLADE SERVER) Intel Xeon Quad-core Processor E5504 Processor (4M Cache, 2.00 GHz, 4.80 GT/s Intel QPI) 4GB PC3 RAM 250 GB HDD (6 Nos) Gigabit Network Adapter HP STORAGE WORKS X1600 Intel Xeon Processor E5504 (2.26 GHz, 8MB L3 Cache, 80W, I 1066) Intel 5520 Chipset 12 TB(12X1) HDD 6GB DDR3 RDIMM RAM Gigabit Server Adapter
	1	HCL INFINITI GLOBAL LINE 2700 SERIES SERVER Intel Xeon L5320 Quad Core @1.86 GHz, 8 MB L2 Cache, 1066 MHz FSB, Intel 5000 VS Chipset, 4 x 1 GB DDR2 FB DIMM RAM, 2 X 146 GB SAS HDD, DVD Writer, HCL 17" TFT Monitor
	72	HCL INFINITI PRO BL-1240 Intel Pentium D925 Dual Core @ 3.0 GHz, 800 MHz FSB, 2 x 2 MB L2 Cache, Intel 945G Chipset, 512 MB DDR II RAM 200 GB HDD, HCL 17" TFT Monitor, DVD ROM Drive)
LAB-II	1	HCL INFINITI GLOBAL LINE 2700 SERIES SERVER Intel Xeon L5320 Quad Core @1.86 GHz, 8 MB L2 Cache, 1066 MHz FSB, Intel 5000 VS Chipset, 4 x 1 GB DDR2 FB DIMM RAM, 2 X 146 GB SAS HDD, DVD Writer, HCL 17" TFT Monitor
	60	LENOVO THINKCENTRE M-72E Intel Core i3 3220@ 3.3 GHz, 3 MB L2 Cache, Intel H61 Chipset, 4 GB DDR II RAM, 500 GB HDD, 18.5" TFT Monitor
Lab III	1	DELL Power Edge T420 Server Intel Xeon processor E5-2407, Chassis with upto 8x35' hot plug Hard drives, Bezel 1333MHz RDIMMS, 2x8 GB RDIMM, 1333MHZ, Low Volt, Dual Rank, X4 Bandwidth, IDRAC port card, 2x500 GB 7.2 RPM SATA 3.5" Hot plug HDD, DVD Drive,

		PERC cable for 3.5in 8 HD Hot plug chassis,, 19.5' LED Backlight Monitor, RAID 1
	30	Dell Optiplex 3020 Intel Core i5-4570 Processor 3.2 GHz / 6 Cache 8GB DDR 3 RAM @1600 MHz 500 GB SATA(7200 RPM) HDD 18.5" Wide LED Monitor
	30	ACER (VERITON M200-H81) Intel Core i5-4460 500 GB SATA HDD 4 GB DDR 3 RAM @1600 MHz 18.5" LCD Monitor
Lab - IV	1	HCL INFINITI GLOBAL LINE 2700 SERIES SERVER Intel Xeon L5320 Quad Core @1.86 GHz, 8 MB L2 Cache, 100 MHz FSB, Intel 5000 VS Chipset, 4 x 1 GB DDR2 FBDIMM 2 X 200 GB SATA HDD, DVD Writer, HCL 17" TFT Monitor
	65	HCL Infiniti Intel Pentium IV@3.0 Ghz/HT,Intel 915GV Chipset,512 MB D 400 RAM, 80 GB SATA HDD, 52X CDROM Drive, 15" Digita Color Monitor
		20 KVA U.P.S – 1 No

HARDWARE SPECIFICATION

PROCESSOR	Intel [R] Xeon® CPU E5320 @1.86 GHz 1.87 GHz
RAM	4.00 GB
SYSTEM TYPE	32 – bit Operating System
OS	Server 2007 Enterprise
HARD DISK CAPACITY	250 GB

- LAN facility

All the 1800 system are connected through LAN.

- Wifi facility

Our college campus is entirely furnished with wifi facility through Access points provided at various places.

- **Proprietary Software / Open source software**

S.No	Proprietary Software
1	WINDOWS 10
2	WINDOWS 8.1 / 8
3	Windows 7
4	windows vista / XP
5	Windows server 2012 / 2008
6	TURBO C / C++
7	JDK 1.7 / 1.6
8	MS Office 2013 / 2010 / 2007
9	MS Office Visio Professional 2013 / 2010 / 2007
10	MS Office Project Professional 2013 / 2010 / 2007
11	MS Exchange Server 2007 / 2003
12	Oracle 10g / 8i
13	MS SQL Server 2010 / 2008 / 2005
14	IBM DB2 7.2
15	MS Visual Studio .NET 2003 Ent. Arch.
16	CE .NET 5.0 / 4.2
17	MS Visual Studio 2010 / 2008
18	MS Front Page 2010 / 2008
19	Visual Prolog Version 6.3
20	Developer 2000
22	IBM Rational Software Architect
23	IBM Rational Suite Enterprise Studio
26	IBM SEED Program for Enterprise Mobile Applications using IBM work light
	Open source software
1	cent os 6.5 / 6
2	Ubuntu 14 / 13 / 12
3	Fedora 17 / 16
4	netbeans
5	codeblock

- **Number of nodes/computer with internet facility**

Our college has 100 Mbps Leased Line connected with 1500 systems

File Description	Document
Any additional information	View Document

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor, gymnasium, yoga centre etc.) and cultural activities.

Answer:

Recreational facilities like gymnasium, yoga centre, etc.,

Recreational facilities for boys and girls are very good. We have a very large playground of about with are 16,000 sq.m, a good and spacious indoor game court of size 21mx 17m (357 sq.m). A swimming pool of size 25 m x 15 m with volume 5 Lakhs litre water is available. All the facilities are established in the year 1997. All the boys and girls of hostlers and staffs of our college are utilized this facilities.

The details are presented below.

S.No.	Description	Items	Details
1	Total area of the play ground (sq.m)	-	16,000 sq.m
2	Details of the outdoor Games available	1. Athletics - Track and Field –1 2. Basket Ball Court –1 3. Volley Ball Court – 2 4. Foot Ball Field – 1 5. Hockey field – 1 6. Hand Ball Court – 1 7. Ball Badminton Court – 2 8. Cricket Field – 1 9. Cricket Net Practice – 1 10. Tennis clay court – 1	12 nos
3	Details of the Indoor Games available	1. Yoga & Meditation hall – 1 2. Badminton court (Indoor) – 2 3. Badminton Court (Outdoor) – 3 4. Table tennis board – 4 5. Billiards Club – 1	21 x 17 mts
4	Details of gymnasium available	1. Dumbbells 15 kg – 2 2. Plats 25kg – 4 3. Plats 20kg – 4 4. Plats 15kg – 6 5. Plats 10kg – 2 6. Plats 5kg – 2 7. Twister – 3 8. Cycle – 1 9. Multi Station – 2 10. Leg Crunch – 1 11. Butterfly Board – 1 12. Abdominal Crunch – 1 13. Motorized treadmill - 1	1 no
5	Swimming pool	25x15 Meters with the capacity of 5 Lakhs liters water. Shallow end – 3 feet and depth – 6 feet	1 No

We have medical centre with essential medicines and facilities. One doctor and one attendant are always available in the clinic. Emergency cases are attended to immediately with utmost care.

1. For the past 15 years, the college runs a health centre and attends to the health and hygiene of students and staff members.
2. The health centre provides various first aid treatment and if when required patients are referred to nearby hospital like Aishwaryam, Gokulam, Shanmuga Hospitals.
3. It has been of great help to the students and others in the college as all the necessary health support facilities are provided in the medical centre.
4. Annual health check-up programmes are conducted for the students during which undiagnosed health problem are detected, followed and treated.
5. The college has provided an opportunity to part time and fulltime staff members to give their service to the sick.
6. Records on the health status of student and staff members are maintained by the Health centre.
7. Counselling is also done by doctors for students who are psychologically affected .
8. First aid medicines are provided for immediate relief without which the student means some to seem help from doctors outside the college.
9. Minor surgical procedures like suturing of wounds are carried out and subsequent wound care (dressing the wound) measures are taken.

We have a large playground, basketball court, tennis court, volley ball court, athlete – track and field. We have indoor stadium, gymnasium, yoga floor and swimming pool. Sportspersons are constantly encouraged to participate in competitive events by way of granting sports - scholarships, cash prizes and waiving of fees, Annual sports events are conducted for students and staff members separately. Cultural activities are conducted for college level and department level for every year.

File Description	Document
Any additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Answer: 47.45

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Answer: 65

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Answer: 32.57

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year wise during the last five years (INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
670	350	380	725	1180

File Description	Document
Audited utilization statements	View Document
Any additional information	View Document
Details of budget allocation, excluding salary during the last five years	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Answer:

Sl. No.	Year	Name of the ILMS Software	Nature of Automation (fully or partially)	Version	Year of Automation
1.	2012-2013	AutoLib	Fully	2	2000
2.	2013-2014	AutoLib	Fully	2	2000
3.	2014-2015	AutoLib	Fully	2	2000
4.	2015-2016	AutoLib	Fully	2	2000
5.	2016-2017	AutoLib	Fully	2.1	2017
6.	2017-2018	AutoLib	Fully	2.1	2017

The Sona Central Library has recently installed a versatile Webbased AUTOLIB- Library Management Software (Advanced Edition)

Members Staff and Students can make use of the facility for library information and to know their account by logging into the following links:

AutoLib – is a popular and advanced Integrated Library Automation Management software, designed and developed by a team of Library & Information Science specialists, database designers, software developers and network specialists.

AutoLib software is an integrated, versatile, user-friendly, cost-effective and multi-user library automation software.

It is WEB enabled for Intranet and Internet environments, incorporating latest IT/WEB tools and techniques and adheres to many international standards.

It is designed to automate various activities of libraries regardless of types of collection or size and also provides WEB - based services on the campus Intranet/Internet.

OTHER PRODUCTS

DigitalCat (Digital Library)

This module allows to create and maintain database of digital library resources such as e-books, e-journals, audio/video clippings, images, pictures, photos, animations, web resources, computer files, etc .,based on Dublin Core metadata standard. It also allows to search and retrieve data.

JAPAR (Journal Articles Performance Analysis Reporter)

To monitor the research output (publications) in an institution - authorwise- yearwise - countrywise - subjectwise - IF - Statistics - Reports - Performance - Digital Content

AutoLib SMS Service - To provide library services through SMS

AutoLib Mobile Service - To provide library services on the user mobiles

1. Database Management - Cataloguing

This module allows to create, update/edit and maintain all databases.

2. Search (Online Public Access Catalogue)

This module is designed to search all **databases** using important fields and print the search results in any desired format/order.

3. Circulation Management - Transaction

This module is designed for all types of counter - transactions (for all documents types) such as:

- Issue/Renewal/Return/Recall
- Reservation /Reservation Cancel
- Reminders/Overdue receipt/No-due certificate
- Overdue reports (based on many criteria)
- Statistics/Reports for all counter - transactions (daily/weekly/monthly/between specific dates)

4. Report Management

This module is designed to generate and print a large number of reports such as: list of books by author, title, unique titles publisher, supplier, call number, subject, department, accession number, date, book type and list of journals/publishers/suppliers/members, etc. It also allows to print accession register, catalogues, amount spent by type of documents/department/subjects and bibliographic reports. All types of statistics/reports for the management can be generated for AICTE/NBA,UGC/NAAC, IMC.

5. System Administration

This module allows to

- Create new user log-in, password and grant **rights** to access various modules
- Create group master – to set due date, allowed cards for different documents for different groups of users globally
- Set overdue charge at various stages/holiday
- Maintain budget master
- Back-up, export and import of data
- Update database globally using various fields
- Generate charts

B. ADVANCED MODULES

6. Acquisition Control System (Book Ordering)

This module is designed to automate various activities involved in book ordering and processing.

Features

- Indent - request for new books (manual/online), checking for duplicates
- Approval, processing,book ordering
- Receipt of documents and invoice processing
- Order follow-up, payment to suppliers
- Budgeting and accounting
- Transfer the processed indents to database
- Status reports, vendor information, etc.

7. Serial Control System (Journals) - This module is designed to automate various activities involved in subscription of journals.

Features

- Creation and maintenance of journal master
- Enquiry and approval of journals
- Subscription /renewal of journals
- Invoice processing, payment
- Receipt of issues and entry (like Kardex)
- Claiming missing issues/replacement
- Browsing/searching issues
- Bound volumes , bindery management, etc.

8. Online Stock Verification This module allows for online stock verification of library resources using Barcode Scanner, Data Capturing Unit and generates reports of books such as - missing, lost, issued, binding, transferred, condemned, available, etc.

9. E-Resources Linking

This module allows linking various e-resources on the web with details

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

Answer:

Sona College of Technology has a Central Library. It is a treasure trove of knowledge. It is revered by faculty members and students as a shrine. It has an excellent collection of books, journals, and documents in science, engineering, technology, humanities, social sciences, management and self- development. It has a plethora of dictionaries, encyclopedias, compendiums, reference books, standards, bound volumes of journals, technical reports, theses, and other resource materials in digital form – video cassettes, compact discs, and microfilms.

The Central Library and Department Libraries are home for a large collection of project cum research reports by students of M.E., MBA, and MCA programme.

M.E project reports, M.Phil. and Ph.D. theses of staff members are readily available in the libraries.

The Central Library is in constant pursuit of acquiring rare books and manuscripts. Recent publications by great authors are added to it.

Also, we keep in touch with sellers of rare book sellers for purchasing them.

We are pleased to report that Nobel Laureate Kazuo Ishiguro's books and Richard H. Thaler's books –

- “The Remains of the Day”,
- “When We Were Orphans”,
- “The Buried Giant”,
- “Never Let Me Go”,
- “An Artist of the Floating World”
- “Advances in Behavioral Finance”,
- “Nudge – Improving Decisions about Health, Wealth, and Happiness”, and
- “Misbehaving: The Making of Behavioral Economics”

Collection of rare Books, manuscripts for Library Enrichment

Author Name	Title	Publisher
Brown P J Ed.; Stevens K Ed.	Nanofibers and Nanotechnology in Textiles	Woodhead Publishing Limited
Day,Robert.W	Geotechnical Earthquake Engineering Hand Book	McGraw-Hill
Crane Robert K	Electromagnetic Wave Propagation Through Rain	John Wiley & Sons Inc
Solomon Amy; Wilson Gwenn; Taylor Terry	100% Information Literacy Success	Wadsworth Cengage Learning
Tatiya Ratan Raj	Elements of Industrial Hazards: health, safety, environment and loss prevention	Taylor & Francis
Duavenoy Penny; Jones Simon; Blundell Barry G	Ethical, Legal and Professional Issues in Computing	Cengage Learning
Yang Xin-She Ed. & et al.	Swarm Intelligence and Bio-Inspired Computation: theory and application	Elsevier
McCann J Ed.; Bryson D Ed.	Smart Clothes and Wearable Technology	CRC & Woodhead Publishing Limited
Han Zhu; Liu Ray K J	Resource Allocation for Wireless Networks: basics, techniques and applications	Cambridge University Press
Krstic Angela; Cheng Kwang-Ting	Delay Fault Testing for VLSI Circuits	Kluwer Academic Publishers
Poole David L; Mackworth Allen K	Artificial Intelligence: foundations of computational agents	Cambridge University Press
Clarke A Bruce; Disney Ralph L	Probability and Random Processes: a first course with applications	John Wiley & Sons Inc
Martin Robert C	Agile Software Development Principles, Patterns and Practices	Pearson
Applegate David L;	The Travelling Salesman Problem: a computational study	Princeton University Press
Hallett Clive ; Johnston Amanda	Fabric for Fashion with 125 sample fabrics the swatch book	Laurence King Publishing Ltd

Books by Booker Prize Winner authors enrich our library.

Sona College of Technology is an institutional member in framing and implementing the programme:
Developing Library Network – DELNET.

DELNET provides resource sharing among the member libraries and offers networking services to the users.

Through DELNET, we get information about rare books, documents, and manuscripts.

4.2.3 Does the institution have the following

1. *e-journals*
2. *e-ShodhSindhu*
3. *Shodhganga Membership*
4. *e-books*
5. *Databases*

Answer: Any 4 of the above

File Description	Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership etc.	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in lakhs)

Answer: 32.82

4.2.4.1 Annual expenditure for purchase of books and journals year wise during the last five years (INR in lakhs)

Answer:

2016-17 2015-16 2014-15 2013-14 2012-13
38.06 27.94 31.22 34.19 32.68

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.5 Availability of remote access to e-resources of the library

Answer: Yes

File Description	Document
Details of remote access to e-resources of the library	View Document

4.2.6 Percentage per day usage of library by teachers and students

Answer: 8.28

4.2.6.1 Number of teachers and students using library per day over last one year

Answer: 400

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Answer:

2012 - 2013

S.No	Item	Qty	Date of Updation	Supplier	Amount
1	Linksys 24P Switch	1	09.04.2012	Magnum Enterprises, Salem-9	39020
	Dlink 24p Switch	4			
	Linksys Wireless Router	1			
	Netfox Media converter	2			
	SC/St Fiber PC	2			
2	Dual Sc Coupler	3	16.4.2012	V-Networks	12432
	SC/St Fiber PC	6			
	Enclosure	1			
4	Finolex 6 Core Fiber	170 m	16.5.2012	V-Networks	14501
	LIU Panel	1			
	Pigtail SC Fiber	12			
	Dual Sc Coupler	6			
5	Dlink 24p Switch	6	29.09.2012	Magnum Enterprises, Salem-9	22800
6	TP-Link Wireless Router	3	05.10.2012	GV Electroniks, Salem	8040

USB Modem	1
LAN Tester	5

2013-2014

S.No	Item	Qty	Date of Updation	Supplier	Amount
1	Brovis AC-150 BGN Wifi Access Point with 48V PoE & clamp	5	10.04.2013	Brovis Wireless Networks Pvt. Ltd., Chennai-02	62500
2	D-Link 24P 10/100 Switch	1	30.09.2013	Magnum Enterprises, Salem-9	3142
3	D-Link 16P 10/100 Switch	4			8380
4	HCL 4U Rack	2			4190
5	Cisco 24P 10/100/1000 Switch	2	30.09.2013	Magnum Enterprises, Salem-9	16190
6	Myruys CAT-6 RJ45 Jack	50	30.09.2013	C.A.Manikandan, Salem-2	15275
7	Myrius 2module white plate	50			3185
8	Myrius Telephone socket	10			845
9	Cyberoam CR500ing Appliance	1	24.10.2013	M/s Digital Track Solutions Pvt. Ltd., Chennai-35	325000
10	Brovis AC-150 BGN Wifi Access Point with 48V PoE & clamp	10	20.12.2013	Brovis Wireless Networks Pvt. Ltd., Chennai-02	125000
11	D-Link 16P 10/100 Switch	3	17.12.2013	Magnum Enterprises, Salem-9	6285
12	4U Rack	3			6285
13	6U Rack	2			4761
14	Wifi wall mount clamp	20	27.12.2013	Vinayaga Industries, Salem-8	7000
15	25V Adapter (Acces point)	1	20.04.2013	Nakoda Electronics, Salem-4	510
16	Cisco 24P Gigabit SG92 Switch	10	25.01.2014	Magnum Enterprises, Salem-9	80952
17	AMP CAT6 24P Patch Panel	6			24104
18	D-Link Punch Tool	2			1904
19	Rack 15U	2	25.01.2014	C.A.Manikandan, Salem-2	9904
20	Rack 6U	3			7142
21	Myruys CAT-6 RJ45 Jack	50			15860
22	Myrius 2module white plate	20	25.01.2014	C.A.Manikandan, Salem-2	1352
23	Myrius 1module white plate	30			1911
24	Mosaic 1&2M Pastic surface Box	75			3412
25	Side cutter	1	13.02.2014	SRM Idustrial Tradings, Salem-4	170
26	Cisco 24P Gigabit Switch	3	20.02.2014	GV Elektroniks & Stationary, Salem-4	22386

2014 - 2015

S.No	Item	Qty	Date of Updation	Supplier	Amount
1	Digilink CAT6 UTP Cable 10 Boxes		03.11.2014	Magnum Enterprises, Salem-9	53809
2	Digilink CAT6 UTP Cable 6 Boxes		05.11.2014	Magnum Enterprises, Salem-9	32281
3	Cisco 24P Gigabit Switch	10	25.11.2014	GV Elektroniks & Stationary, Salem-4	60811
	Dlink 42U Rack	1			
4	Digilink CAT6 24 Port Patch Panel	6	23.12.2014	Magnum Enterprises, Salem-9	89950
	Digilink CAT6 1m Patch cord	130			
	Digilink CAT6 2m Patch cord	130			
	Cisco 24P Gigabit Switch	4			
5	RJ-45	300	14.2.15	GV Elektroniks & Stationary, Salem-4	43206
	I/O Legrand	50			
	Lan Tester	3			
6	Dlink POE 8Port Switch	5	05.03.2015	Magnum Enterprises, Salem-9	19250

2015 - 2016

S.No	Item	Qty	Date of Updation	Supplier	Amount(Rs.)
1	Digilink CAT6 UTP Cable 3		26.06.2015	Magnum Enterprises, Salem-10	13050
2	Dlink POE 8Port Switch	1	22.07.2015	Magnum Enterprises, Salem-9	3850
3	Legrand CAT6 I/O	30	12.8.15	GV Elektroniks & Stationary, Salem-4	9601
	Legrand CAT6 Cable	3			
	Legrand CAT6 I/O	30			
4	Legrand 2m Faceplate	30	19.08.2015	GV Elektroniks & Stationary, Salem-4	33330
	Legrand 1m Surface box	30			
	9U Rack	1			
5	Cisco 24P Gigabit Switch	5	07.08.2015	Magnum Enterprises, Salem-9	32375
	Digilink CAT6 2m Patch cord	30			
6	Netfox Media Converter	2	16.02.16	Digital Track Solutions Pvt Ltd, Chennai-35	11235
	Dlink crimping tool	2			
	Cable Tester	3			
7	Aruba Instant IAP-215	10	12.02.16	Digital Track Solutions Pvt Ltd, Chennai-35	268800
	Wifi Acces Point 802.11ac				

Dual Radio Integrated antenna

8	Aruba 220 AP Mount Kit	10	12.02.16	Digital Track Solutions Pvt Ltd, Chennai-35	8400
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2016 - 2017

S.No	Item	Qty	Date of Updation	Supplier	Amount(Rs.)
	Cisco 24P Gigabit Switch	12			
	Netgear GS 108P-8Port switch	5			
1	Aruba Instant IAP-215 Wifi Acces Point	12	22.06.16	Digital Track Solutions Pvt Ltd, Chennai-35	475,860
	802.11n/ac Dual Radio Integrated antenna				
	Aruba 220 AP Mount Kit	12			
	Netfox Media Converter	6			
2	Digilink CAT6 UTP Cable	12	10.06.2016	Magnum Enterprises, Salem-9	64200
3	Netfox Media Converter	4	27.06.2016	Magnum Enterprises, Salem-10	15540
4	6U Rack	3	12.02.16	Digital Track Solutions Pvt Ltd, Chennai-35	45150
	Cisco 24P Gigabit Switch	5			
	Cisco 28P Gigabit Managed Switch	6			
5	Digilink CAT6 UTP Cable	4	27.06.2016	Magnum Enterprises, Salem-10	116250
	9U Rack	1			
	Amp RJ45 Connector	200			
6	Consumables 2016-2017	-			268900

4.3.2 Student - Computer ratio**Answer:** 2.55

File Description	Document
Student - Computer ratio	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)**Answer:** ≥50 MBPS

File Description	Document

Details of available bandwidth of internet connection in the Institution

[View Document](#)

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Answer: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Answer: 11.9

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
202.06	409.09	158.91	162.24	182.97

File Description	Document
Audited statements of accounts.	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Answer:

The established systems and procedures for maintaining and utilizing physical, academic and support facilities – laboratory, library, sports complex, computers, classrooms etc., is presented as follows

1. Every Department looks after its assets and tools.
2. Requests for replacements / repairs are brought to the notice of Maintenance wing.
3. The MIS in turn, sends the request to the concerned Maintenance wing.
4. During periodical meetings, the HoDs furnish the requirements for their Departments to the Management.
5. The Management readily procures the materials / tools or arranges for repair works.
6. Each and every member of the College has self-responsibility and acts accordingly.

The College has a policy for creation and enhancement of infrastructure. The policies of our institution are:

1. To make the Institution an excellent environment of learning.
2. To develop a GREEN ENVIRONMENT.
3. Improvements are constantly made to the Infrastructures, Laboratories and Equipments.
4. To plan for classrooms as per the requirements.
5. The establish laboratory as per the syllabus.

6. To have seminar halls and board rooms.
7. To provide amenities like canteen, transport, playground etc.
8. To establish classrooms and laboratories for newly sanctioned departments.
9. To include infrastructure to accommodate the increase in student strength in the existing departments.
10. To purchase books for central library and departmental library to meet the requirements.

The specialized services provided by the library are:

1. Manuscripts
2. Reference
3. Reprography
4. ILL (Inter Library Loan Services)
5. Information Deployment and Notification
6. OPAC
7. Internet Access
8. Downloads
9. Printouts
10. Reading list / Bibliography compilation
11. In-house / remote access to e-resources
12. User Orientation
13. Assistance in searching Database
14. INFLIBNET / IUC facilities

The infrastructural development of the library over the last five years. are

1. Added more bookcase, reading tables, New arrivals rack, Wi - fi equipments
2. Established Carrier Corner and Industry Connect for our Students.
3. Feasibility study for implementing RFID
4. Publishing Sona Library News Letter

The library organizes workshop/s for students, teachers, non-teaching staff of the College to facilitate better Library usage.

Our college has implemented the dedicated Management information System that provides services such as Attendance entry, Marks entry, Placement, Accounts and various report generation.

The college as an Estate Office designated officer for overseeing maintenance of buildings, class rooms and laboratories.

1. Every day pathways, class rooms and office rooms are cleaned. We maintain a spic and span environment.
2. We have pleasant greenery in our college and we nurture a number of trees and plants.
3. Everyday the shedding – leaves, twinges are removed, collected and disposed in an environment friendly manner.
4. The restrooms are cleaned thrice daily.
5. Adequate number of rest rooms is provided in each and every block.

We have a large team of dedicated cleaning personnel (both male and female). They keep neat and clean.

We have a large playground, basketball court, tennis court, volley ball court, athlete – track and field. We have indoor stadium, gymnasium, yoga floor and swimming pool. Sportspersons are constantly encouraged to participate in competitive events by way of granting sports - scholarships, cash prizes and waiving of fees, Annual sports events are conducted for students and staff members separately.

5.Student Support and Progression

5.1 Student Support**5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years****Answer:** 34.12

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1572	1634	1727	1681	1604

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years**Answer:** 6.64

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
367	250	284	322	375

File Description	Document
Any additional information	View Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document

5.1.3 Number of capability enhancement and development schemes –

1. Guidance for competitive examinations
2. Career Counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and Meditation
8. Personal Counselling

Answer: 7 or more of the above

File Description	Document
Details of capability enhancement and development	View Document

schemes	
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Answer: 22.99

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1158	1169	1077	1116	1012

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document

5.1.5 Average percentage of students benefitted by Vocational Education and Training (VET) during the last five years

Answer: 17.69

5.1.5.1 Number of students attending VET year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
843	895	861	774	886

File Description	Document
Details of of students benefited by Vocational Education and Training (VET)	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Answer: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Answer: 55.67

5.2.1.1 Number of outgoing students placed year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
732	1044	891	587	602

File Description	Document
Any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Answer: 25.13

5.2.2.1 Number of outgoing students progressing to higher education

Answer: 332

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in state/ national/ international level examinations during the last five years (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOFEL/Civil Services/State government examinations)

Answer: 32.01

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOFEL/Civil Services/State government examinations) year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
30	25	25	44	39

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOFEL/Civil Services/State government examinations) year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
140	120	110	95	80

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

Upload supporting data for the same

[View Document](#)

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) during the last five years

Answer: 80

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
9	12	21	15	23

File Description	Document
e-copies of award letters and certificates	View Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Answer:

The college has active student council which helps the students to actively participate in the development of the institute and also develop their career, personality and organizational skills through interactive programs with the faculty, administration and society. The goal of the student council is to provide a common platform to students for co-curricular and extra-curricular activities. There are various technical and non-technical clubs run by the students in the institute. The elected members and other student volunteers run the events organized under these clubs. Each department has a separate technical association. The student chairman and the student secretary of the association, conduct various events for the development of the students in their department.

The list of technical associations are as follows:

1. CSE association
2. IT association
3. Mechanical association
4. Civil association
5. ECE association
6. EEE association
7. FT association
8. MBA association
9. MCA association

10. General Engineering association

There are different general clubs in the college which help the students to associate with the club based on their interest. An overall staff coordinator is appointed by the institution for monitoring the activities taking place in each club. For each club, there is a separate staff co-ordinator who is responsible for managing all the activities conducted by the students in the club. The club details are given below:

S.No	Clubs
1	NCC
2	NSS
3	YRC
4	Fine Arts Association
5	Tamil Mandram
6	Aptitude & IQ Club
7	Women's Development Wing
8	The English Club
9	Sonaria Music Club
10	Science Club
11	Tremors Club
12	Dexters' Club
13	Sona Programming Club

An election is conducted to elect the club members under the supervision of the overall staff coordinator and the concerned club staff coordinator.

Each club has student Chairman from the final year and Secretary from the third year. The students from the institution who are interested in a particular club can associate themselves with the club. The Chairman and Secretary of the concerned club is responsible for conducting various awareness program for the benefit of the student.

The different student activities for the benefits of the society :

NSS :

The NSS unit of the institution consists of 100 socially sensitive students with a deep sense of service to participate in the activities of the club with verve. With the unswerving support of the Management, the club further enhances the social spirit through seminars on personality development, donation of eye and other organs, videography and photography.

NCC:

Sona College of Technology is committed to social and national responsibilities; bearing this in mind, we have raised the NCC Signal Coy for boys and army wing for girls from 2004-05 onwards. We believe that an individual will come to possess an adoring personality only by involving himself / herself in activities like NCC, NSS, etc.

Sona College of Technology is equipped with several infrastructure facilities like short-range firing and offers obstacle courses for NCC training programme. The NCC programme provides ample opportunities to the cadets by conducting firing camps, drill practices, personality development and voluntary service programmes.

The mission and vision of our NCC wing is to create awareness about its importance and role in nation building among the student community.

Youth Red Cross:

The Red Cross is an international organisation meant for humanitarian services. It is a non-religious, non-political and a non-sectarian international body. YRC is a part of the Indian Red Cross Society; it was inaugurated in August, 2003 with well defined objectives such as :

- Protection of Health and Life
- Service to the sick and the suffering by organizing .
- various health camps such as eye camps, vaccination camps, health awareness, etc.
- AIDS Eradication Programmes

Each Department has separate election for electing their Chairman from the final year, Secretary from the third year and representative for each section in the concerned department. The Chairman and the Secretary are responsible for organizing various seminars, workshop, symposia and other events. The chairman under the supervision of their Head of the Department will spearhead the council activities such as planning, executing and monitoring the calendar of activities across the academic year.

Each class in the department has set of student representative who are responsible for representing the problems faced in the class.

Students are involved in Board of Studies for framing the curriculum and syllabus. Final year student representatives were involved in the department meeting while framing the curriculum. The suggestion given by the student representatives will be incorporated and presented in the Board of Studies Meeting. Student representatives were also asked to attend the Board of Studies meeting to represent the issues faced by the students.

File Description	Document
Link for Additional Information	View Document

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

Answer: 30.6

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
22	23	36	36	36

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions	View Document

5.4 Alumni Engagement

5.4.1 *The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years*

Answer:

Sona Alumni Association functions as a nodal agency for maintaining liaison with the alumni and to involve them in the development and growth of the institution. It will promote and encourage the alumni to exchange professional knowledge by undertaking and facilitating conferences, seminars, lectures and meetings amongst alumni, students, faculty and others.

Continuous interaction with Alumni is expected to widen the placement opportunities of the students. Alumni Day is being organized by the departments concerned. Based on the convenience of the Alumni, Alumni day is celebrated every year department wise. Alumni Coordinators of the department concerned register and coordinate the event.

Sona Alumni Association believes in fostering a strong alumni network that not only helps former students remain connected but also provides an avenue for the philanthropic spirit of successful alumni. The Alumni Association will provide a platform for sharing intellectual, cultural, career and professional experiences not just with the present students but also with other alumni. Our goal in the Alumni Office is to enable the alumni remain connected with Sona in order to promote stronger connections. The association helps to provide opportunities for dialogue, sharing knowledge, voluntary service, social interaction and philanthropy.

The Sona Alumni Association has a robust mechanism. It acts as a bridge between the former students, current students and institutions. The institute regularly interacts with the Alumni Association.

The Sona Alumni Association organizes Alumni meet once in a year and collects and updates the alumni database. It also collects the addresses of the employers through the feedback given by the Alumni. The Sona Alumni Association will also interact with the alumnus for the campus drive and also for signing MoUs.

Sona Alumni is made to involve in different activities such as

- Bos member for the development of the curriculum.
- Industrial mentor to enhance the students' knowledge with respect to industry standards in the current area.
- Giving guest lectures to enrich the student skills.
- Giving training to the final year and third year students. They conduct Mock interviews, Group Discussions (GD) which help the students to face the campus drive.

Sona Alumni Association has taken different initiatives to get the alumni details such as

1. Alumni Chapter

Chapters are created by SONA alumni association in India and other countries to share their experience and to meet other **sonatans** living in their area.

2. Know your Alumni

Know our Alumni network helps connect all our **Sonatans**. It is a mutually beneficial relationship. SONA network is the perfect place to build connections, build personal brand and work with new people. SONA puts the alumni at the center of a connected and exclusive global network of people and experiences.

3. Alumni contribution

The success of SONA Campaign depends on the collective involvement and support of the college's global network of alumni and friends. Participation in its many forms will signal the strength and commitment of the SONA ALUMNI community.

4. Alumni Stories

Sona Alumni Association collects various stories of our alumni to be published in its website. These stories will share alumni work achievements, reflections on the SONA experience, and service contributions.

File Description	Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years (Amount in rupees)

Answer: 2 Lakhs - 5 Lakhs

File Description	Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Answer: 15

5.4.3.1 Number of Alumni Association /Chapters meetings held year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
2	2	4	1	6

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document
Report of the event	View Document

6.Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Answer:

Vision

To become an institute of great repute, in the fields of science, applied science, engineering, technology and management studies, by offering a full range of programmes of global standard to foster research and to transform the students into globally competent personalities.

Mission

- To offer graduate, post-graduate, doctoral and other value-added programmes beneficial for the students

- To establish state-of-the-art facilities and resources required to achieve excellence in teaching-learning and supplementary processes
- To provide faculty and staff with the required qualification and competence and to provide opportunity to upgrade their knowledge and skills
- To motivate the students to pursue higher education, appear for competitive exams, and other value added programmes for their holistic development
- To provide opportunity to the students and bring out their inherent talent
- To establish centres of excellence in the emerging areas of research
- To have regular interaction with the industries in the area of R & D and offer consultancy, training and testing services
- To offer continuing education and non-formal vocational education programmes that are beneficial to the society

Governance

The governance of Sona College is headed by the members of the management consisting of the Chairman and the two Vice-Chairmen. The Chairman of Sona College is also the Chairman of the Governing Body (GB) of the college and the Vice-Chairmen are the key members of the GB, which also includes nominees of UGC, State Government and Anna University, and experts from industry.

The GB is the apex body of Sona College and all of the major institutional decisions are taken at its biannual meetings (quarterly as of 2018). Perspective plans of the college for the years ahead are discussed at the GB meetings and achievements at the college and department levels are reviewed and discussed, and decisions are taken on developing a broad roadmap for the institution to pursue.

The members of the management, nominees of the governmental bodies and the industry experts offer advice for the overall development of the college and also review and approve decisions taken at meetings of other major committees of the college.

The GB functions on the basis of a set of terms of reference which lays out briefly its overall purpose, constitution, roles and responsibilities of the members, duration of their membership, quorum, etc.

The **perspective plans** of the college are tabled at every meeting to discuss and decide on the directions in which the college needs to move over the next four or five years. As the educational system is functioning in a constantly changing environment of political changes, evolving governmental policies, falling standards in school education, newer needs for faculty competencies, etc., the perspective plans of the college too have suffered changes every year to keep pace with the changes in the external factors.

Governance at Sona College with regard to specific but major areas of institutional development such as Teaching learning, Curriculum development, Faculty, Staff & Student development etc., is achieved through the meetings of appropriate committees like the Finance Committee, Academic Council, Discipline-wise Boards of Studies, and so on. However, the decisions of these committees require to be approved by the GB. There are terms of reference for each of these next-level committees with the essential details as explained for the GB.

Faculty representation in the GB is at different levels namely the Principal, Directors all of whom are also professors in their respective parent departments, and two professors, selected by rotation. Their participation in the GB meetings is considered vital to many of the decisions related to curricula, departmental and research infrastructure and development, faculty and student development and other related matters.

Faculty are directly involved in decision-making at all levels as Chairpersons or members of committees, such as Board of Studies, Academic Council, Women Empowerment, placement and training, community development, student clubs, hostels and so on.

In keeping with the social responsibility of Sona College to the community at large, the college has remarkably stimulated the economy of the region through technical education, technology transfer, rural development, and employment-based skill development for the underprivileged, especially women and differently-abled.

File Description	Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Answer:

The Principal, Directors and the Heads of the Department (HOD) concerned take decisions in all academic matters. The HODs conduct periodic meetings with the faculty and students and offer them suggestions. They also discuss with the Principal, Directors, and Chairman of the Board of Management on important matters related to the college functioning, and decision is taken by them through consensus. Most rules and regulations are circulated among staff, and decision is taken only after a thorough discussion with the stakeholders. The final decisions taken are circulated among all stakeholders for adoption. The discussions normally emanate from the faculty, at the faculty meetings with the HODs and then in the HODs meeting with the Principal. Most of the information like organizing conferences, permitting a faculty to travel overseas for presenting a paper, etc. travel from bottom to top for approval by the Management. If there is a common rule governing all concerned, it comes from top to bottom, that too after initiating a talk with the faculty or HODs as the case may be.

Case Study

Decentralization and Participative management in Research and Development (R&D)

Every department has a Department Consultative Committee (DCC), in which HOD acts as the chair person. DCC members regularly meet with the department faculties and take necessary steps to formulate and implement strategic plans of the institution. The role of the DCC is to review and approve industries or other identified organizations for industrial training, internship or project work for students. Also, the DCC gets the feedback from all the staff and study the impulses of the department in general and take steps for further improvements and recommend to the management for further corrective actions through Principal. Every Head of the Department of the Institution is empowered to organize conferences, workshop, symposium, etc, to develop their faculties and students. For the student academic development, each HOD acts as the Chairperson of the respective board of studies and recommends changes in the curriculum according to the industry needs. Recently we introduced Choice Based Credit System (CBCS) to enhance the knowledge of the students.

Every department has a vision to widen the research and development activities in the field of emerging areas like nano-technology, robotics, automation, etc. In our institution, all the R&D centres have been decentralised and monitored by the department heads or senior research heads. Our Institute's commitment to advanced research in the areas of science, engineering and technology has nurtured thirty plus centres of excellence. Every department is encouraged to have at least one such centre. Many departments have established two/three centres each.

These centre heads will present the progress of their research activities before the management once a fortnight. To encourage the faculty and students of Sona College to carry out consultancy projects and testing services for industry, the management provides 60:40 sharing in the net revenue of such projects. The centres focus primarily on applied research, product development, learning-resources development and training of industry personnel. All these centres have in place advanced equipment and current technology.

There is a strong tendency towards inter-disciplinary research, especially in the areas of nano-technology, robotics, automation, etc, that generates new ideas and promotes the development of innovative products and processes. Both the faculty and the students alike contribute to the research, development and innovation at Sona.

The individual department research centres are monitored and controlled by the centre heads. The management gives full support in terms of finance and human resources to encourage application of patents submit research proposals, publications, participation in conferences and workshops, etc.

The Top Management gives ample freedom and flexibility to all the heads of the department lead all the Academic and Research and Development.

File Description	Document
Link for Additional Information	View Document

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Answer:

The strategic plan in brief is as follows:

- Improving Under Graduate (UG) and Post Graduate (PG) Education by incorporating Modern Teaching Learning methods.
- Increased initiative to be taken to get funds from the Department of Science and Technology, UGC and other funding agencies.
- Focus on developmental aspects such as student intake, curriculum improvement, infrastructure enhancement, accreditation and twinning programme with foreign university.
- Improving Research and Development, Industry Interaction, Internal Revenue Generation, Collaboration with Foreign Universities, Alumni Interaction, Entrepreneurship, and Social Responsibility Initiatives.
- Envisioning the establishment of a deemed university and aiming to offer world-class education and research through reputed international collaborations.

Example of successfully implemented strategic plan

The strategy to implement: Improving Under Graduate (UG) and Post Graduate (PG) Education by incorporating Modern Teaching Learning methods.

Learning Management System (LMS) for the academic and knowledge development of the students is successfully implemented in our campus. The LMSs used are:

1. Black board
2. Lecture Capturing System

1. Black Board

SONA has adopted Blackboard (Bb) LMS in teaching learning process for improving the quality of course delivery. SONA has taken the following steps to improve the effective usage of Bb in the college.

- A core team from IT department is constituted to take the responsibility of implementing and monitoring the working of Bb. The team has ensured that the services of Bb can be accessed from outside through a public domain (<https://sonalearn.org>) as well as within a college through intranet (<https://172.2.2.2>).
- As per the instruction of SONA management, the Bb core team supports and helps the staff and students to access Bb services from trusted devices such as desktop, laptop, mobile etc. by creating a non-exportable client certificate. Users should have installed the client certificate in his/her device for accessing Bb services.
- The core team gives training to all the faculty members of the college on the following services of Bb
 - Uploading a course contents and assessment patterns

- Uploading assignments with rubrics and evaluating assignments
- Checking plagiarism on the assignments submitted
- Creating discussion forums for the courses
- Tracking student participation in the enrolled courses
- Making announcements
- At the beginning of each semester, the core team will interact with each department Bb coordinators for collecting the faculty workload. According to the information, faculty and student will be enrolled for the courses created in Bb. Students will be getting the access to course content, assignment and assessment posted by the faculty once they login into Bb.
- The core team conducts the Bb review meeting once in a month for monitoring the usage of Bb by the department faculty and students. In this regard, the department Bb coordinators need to submit their department usage report which has the following information
 - Total Hits in the courses
 - Total Time in the courses
- Apart from the courses in the curriculum, the departments are using the Bb services for conducting GATE courses and continuing education programmes.

2. Lecture Capturing System (LCS):

The Sona College of Technology has implemented the Lecture Capture System, one of the teaching learning processes. It is a **Comprehensive Video-Based Learning Platform** used by our students. The Lecture capture system has been installed in 60 classrooms, covering 8 courses from 8th July 2016.

Lecture Capture system is an automated audio-video recording solution for class room lectures. It provides access to classroom video lectures and activities in online. Students are accessing the recorded video lectures and other materials by using internet URL: <http://182.73.107.187/login>, a.impartus.com outside the campus. The students can access the videos through Intranet also, link <http://172.21.1.2/login/> inside campus. Totally 315 professors are using the Lecture Capture solutions and 2800 Students are watching the video lectures through laptops, tablets and Android platform.

Benefits for professors:

- Help to improve the overall teaching performance.
- Improve the student test performance.
- Chance to correct unfortunate mistakes during classroom lectures.
- Improve content and delivery of classroom lectures.
- Review our own lectures.
- Improve the communication and teaching skills.
- Brought a self –awareness.
- Review specific topics and sections of lectures after completion of lectures.
- Absent students can also access this lecture.
- Students to have a recap of the lessons taught in the class.

Benefits for Students:

- Accessible all the lectures anytime, anywhere.
- Watch the missed lectures during absent the class.
- Review all the important concepts many times.
- Spend less time for preparation of examination.
- Good for reviewing the topic which is not clearly understood.
- Help to improve the academic performance.
- Give more confidence while preparing for exams.
- Achieve a deeper and more current understanding.
- Availability of all contents at one place.

File Description	Document
Strategic Plan and deployment documents on the website	View Document
Link for Additional Information	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Answer:

The various bodies of our institute are:

I. Statutory Bodies and Committees II. Non-Statutory Committees III. Externally-Constituted Committee

The Terms of Reference of the various committees are :

1. Statutory Bodies and Committees

Governing Body (GB):

Functions: Subject to the existing provision in the bye-laws of the college and rules laid down by the state government, the Governing Body of the above colleges shall have powers to

- Fix the fees and other charges payable by the students of the college on the recommendations of the Finance Committee.
- Institute scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic Council.
- Approve institution of new programmes of study leading to degrees and/or diplomas. Perform such other functions and institute committees, as may be necessary and deemed fit for the proper development, and fulfil the objectives for which the college has been declared as autonomous.

Term of Office: Two years, except for the UGC Nominee whose term will be a full six years

Meetings: At least twice a year

Academic Council (AC):

In the Academic Council body, the teachers like the Principal, Directors, Deans, Heads of the departments, subject expert teacher, etc, act as members to take decision about the academic plan, implementation of academic strategies, quality improvement decision, etc, for the development of the college and to review all academic matters of Sona College and provide guidance and advice to the college in maintaining a high academic standard

Meetings: At least once a year

Discipline-wise Boards of Studies:

Functions: To review the curriculum and syllabi of the programme/discipline concerned and provide relevant guidance and advice so that the programme/s always stays in tune with current industry requirements.

Meetings: As Many Times as Necessary

Finance Committee:

Functions: a) To be an advisory body for the Governing Body

b) To consider budget estimates relating to the grant received/receivable from UGC, and income from fees, etc collected for the activities to undertake the scheme of autonomy

c) To audit accounts for the above

Meetings: At least twice a year

Planning and Monitoring Board:

Functions: To formulate plans for the development and growth of Sona College on the advice of the Governing Body of the college and provide guidance and advice in the implementation and monitoring of the plans

- At least twice a year

Anti-Ragging Committee:

Function: To maintain Sona a ragging-free campus

· **Tenure of members:** Two years

· **Meetings:** Twice a year

· **Roles & Responsibilities:**

a) To create awareness about ragging and ensure a student-friendly environment at all times

b) To facilitate campus monitoring to ensure nil ragging

· Quorum: Minimum 2/3rd

Women Empowerment Cell/ Committee:

: To spread the awareness of gender issues among all women, To ensure that they have access to opportunities, devoid of any gender bias or discrimination on the grounds of sex, to help them rise to their full potential

Meetings: At least twice a year

Complaints and Redressal Committee:

Functions: To review any cases of sexual harassment on the campus and provide proper redress

Meetings: As and when necessary, but definitely twice a year

Tenure of members: Two years

Discipline and Welfare Committee:

Objective:

- To ensure maintenance of good student discipline and provide proper amenities for student well being on the campus

· Meetings: As and when necessary, but definitely twice a year

Tenure of members: Two years

II – Non-Statutory Committees

Institution Management Committee:

- To review and monitor day-to-day progresses in the twelve broad focus areas of the college.
- Once a month, normally on the first Friday

Management Review Committee (Sona-QMS):

Functions: To review the findings of the internal audits of Sona-QMS and also to formulate improvements in the established quality processes

Meetings: Twice a year

III – Externally-Constituted Committee

Grievance Redressal Committee

In this committee one Sona teacher is appointed as a Coordinator to report grievance cases to Anna University-appointed Ombudsman

Meetings: At least twice a year

SERVICE RULES

1. Hours of Work

The working hours for the Teaching and Non-Teaching faculty are between 9.00am and 5.00pm and for non-teaching and administrative staff, the working hour is from 9.30 am to 5.30 pm including administration department. An employee is expected to put around 49 hours of work every week.

2. Attendance and Punctuality

Regular attendance is essential for the institute's efficient operation and is a necessary condition of employment. Employees are expected to report to work as scheduled and on time. All the departments have attendance register, which is monitored by the respective HODs.

3. Identification Card

All members of the staff are provided with an identification card and are expected to carry / wear it while within the college premises.

4. Code of Conduct

Dress Code

- The college observes a formal dress code. All employees should use discretion in wearing attire that is appropriate for the work in the institute.
- The women staff members are required to wear salwar kameez or saree, while the male staff members are required to be formally dressed with shirts tucked in and a formal pair of shoes.
- All teaching staffs are required to wear white coats provided by the institute during lectures.

Footwear

- Staff members are requested to wear Slip-on Shoes (Cut shoes or Pump shoes) / regular chappals, with normal heels. Bathroom or "Hawai" chappals are not allowed.

Prohibited Activities

- The Institute holds a strong opposition to alcohol, drug use and gambling on institute premises. The Institute strictly prohibits employees and visitors from bringing any firearm into the institute premises.

- In addition, any damage to Institute's property, dishonesty and harassment or violence against SCT's students, visitors or staff will lead to disciplinary action, This includes suspension and discharge under termination for failure to comply with institute policy.

Use of Telephone, Internet and Computer

- The Institute understands that when employees work during the week it is occasionally necessary to conduct personal business during office hours. However, the employee should limit their personal use of telephone, computer and Internet during office hours.

Library

- The library will be kept open from 8.00am to 8.00pm on all working days and from 10.00am to 5.00 pm on Sundays. Staff and students can make use of this facility.

5. Conditions of Appointment

1. The staff appointed, will be on probation for a period of two years from the date of their joining.
2. The institution makes the offer of employment on the basis of the bonafide statements and facts provided by their application form for employment. At the time of employment or during employment, if the institution finds the information provided to be false or misleading, it reserves the right to take appropriate disciplinary action against them.
3. During working hours, they shall use all their competing knowledge and abilities to serve the institution faithfully and shall comply with the rules, regulations and procedures which are in effect from time to time and shall entirely devote their time for the growth and betterment of the institution.
4. Without the institutions written consent, the staff shall not be in any way directly or indirectly engaged or concerned with any other assignment or employment during or outside their hours of work in the institution.
5. During the period of service, the staff member's increment / promotion will solely be based on the appraisals done by the management.
6. The staff member will be entitled to leave facilities as per the rules that may be prescribed from time to time.
7. The retirement age of staff members is 58 years. Further, the extension of service will be decided on case-to-case basis.

6. Higher Studies

Guidelines for Pursuing Higher studies

In order to streamline granting approval for staff wishing to pursue higher studies, the following guidelines are framed.

a) Part Time External: (M.E./M.S/Ph.D)

1. The staff member should have served a minimum of **one year** in Sona.
2. The staff member should serve for **minimum three years** after completion of higher studies.
3. The condition of minimum one year of service before applying for part time external can be waived off on a case-to-case basis.
4. In such condition, the staff member should serve for minimum **four years** in Sona, after completion of higher studies.
5. The staff members who join and need to attend the classes for doing a part time external during working days of the institution are permitted to do so, but they are to compensate the same from their earned leave / vacation leave.

b) Full Time (on study leave but loss of pay) (M.E/M.Tech/M.S.)

1. The staff members should have served a minimum of **one year** in Sona.

2. Study Leave is granted for those staff members who wish to go for higher studies (part time). After completion of studies, the staff members have to come back and serve the college for a minimum of **two years**.
3. In-case the staff member is not serving the college after completion of studies, the staff will have to pay back Rs. 20,000/- to the institution.

c) Part Time Studies (B.E)

1. The staff members should have served minimum of **one year** in Sona.
2. Study Leave is granted for those staff members who wish to go for higher studies full time/ part time. After completion of studies, the staff members have to come back and serve the college for minimum of **two years**.

d) Sponsoring staff members to IIT / IIM / other reputed institutions

1. The staff members who are sponsored for higher studies at IITs / IIMs and other such reputed institutions should have served minimum **two years** in Sona.
2. Such staff members will be paid full / half salary for the prescribed duration of study.
3. After completion of their studies, they need to come back and serve Sona for minimum **3 years**. In any situation, if they don't, then the entire amount of salary that is paid to them during their higher studies needs to be refunded. A bond incorporating the above conditions has to be executed along with two sureties.
4. Only those staff members who wish to do Ph.D / M.Tech at reputed institutions will be sponsored. The list of such reputed institutions will be separately intimated and will be updated regularly.
5. The maximum number of staff to be sponsored under this category will be subject to a maximum of 2 staff per department per year.

7. Resignation

- A member of the staff who wishes to resign from services will be relieved only at the end of the semester. Even in such case, a minimum of one-month notice is required.
- If they need to be relieved immediately or earlier they will be required to compensate the institute with a maximum of two month's salary. The actual compensation will be decided on a case-to-case basis.
- The letter of resignation should be signed, dated and the reason for resignation should be explained; along with the detail of intended last day of work should be mentioned clearly. The letter should be submitted to the department head.
- Staff members will ordinarily work during their notice period. During the notice period all forms of leave stands cancelled except for leave with loss of pay.

a) Procedures for Relieving & Salary Certificate / Service Certificate

Procedures for Relieving

- Staff members, who wish to be relieved, have to submit a notification regarding his/her resignation a month before. If they need to be relieved immediately or earlier, they will be required to compensate the institute with a maximum of two month's salary.
- The letter of resignation should be signed, dated and the reason for resignation should be explained; along with the detail of intended last day of work should be mentioned clearly. The letter should be submitted to the department head. All resignations must be recommended by the department head forwarded through the HR, approved by the Principal and the chairman.
- The approved letter of resignation should be submitted to the Establishment section to get the Salary certificate & Service certificate.

Salary certificate / Service certificate

- Staff members who are in need of salary certificate / service certificate, have to submit a requisition letter to the principal, forwarded through HR.
- After getting approval, the same must be submitted to Establishment Section.

b) Retirement

The retirement age is generally fixed as 58 years. The management holds the decision on whether to continue with the retired staff. The salary and other benefits will be at the discretion of the management.

8. Faculty Profile

Updated Staff Bio-Data

All HODs and staff members are to submit a copy of their Bio-Data duly filled by them, once in a semester.

9. Leave Details:

The leave facility for the staff members is as follows:

LEAVE	NUMBER OF DAYS			ELIGIBILITY
STATUTORY HOLIDAYS	A list of statutory holidays will be announced every year			All staff
CASUAL LEAVE	12 days			All staff
OPTIONAL LEAVE	1 day			All staff
MEDICAL LEAVE	15 days / year with ½ pay			After two years of service
MATERNITY LEAVE	3 months with full pay (for first 2 children only) (Staff members who go on maternity leave are not eligible for vacation leave during the calendar year concerned and they can avail vacation only after completing one year of service from the date of rejoining.) (Staff members resuming duty after maternity leave have to complete six months of service to be eligible for the maternity leave pay.)			After one year of service
VACATION LEAVE	Teaching	Vacation period	service less than years	After one year of service
		Summer	2 Weeks	
		Winter	1 Week	
VACATION LEAVE	Non-Teaching (Sanctioned Posts)		16 days	After one year of Service
	Non-Teaching (Non-Sanctioned Posts)		10 days	
	Non teaching staff can avail the leave round the year subject to the approval of Principal.		33 days 22 days	

All the above mentioned leave is calculated for calendar year only. Staff members who complete their tenure of one year service in between the calendar year and also the female staff members who rejoin duty after maternity leave in between the calendar year are eligible to avail VL as per the norms given below.

Sl. No	Completion / Rejoining		Eligibility	Remarks
1	I quarter	Jan / Feb / Mar	4 Weeks	2 Weeks in summer & 2 Weeks in winter
2	II quarter	Apr / May / Jun	3 Weeks	1 Weeks in summer & 2 Weeks in winter
3	III quarter	Jul / Aug / Sep	2 Weeks	Winter
4	IV quarter	Oct / Nov / Dec	1 Week	Winter

Note: The above leave is not eligible for encashment

RECRUITMENT PROCEDURE

Step: 1

Preparation of data for staff requirement

Requirement as per AICTE			Availability			Shortage		
Professor (P)	Asst. Professor (AP)	Lecturer (L)	P	AP	L	P	AP	L

Step: 2

Submission of requirement from the department heads based on the vacancy position as per AICTE norms and also based on special needs for research.

Step: 3

Publicizing the vacancy position through various media such as,

- Advertisement in Newspapers
- Notifying in notice boards in the institution premises
- Notifying in college website
- Browsing through jobsites like **Naukri.com** and **Monsterindia.com**.

Step: 4

Collection and short listing of applications received through the above sources. Calling the short listed candidates for interview at the institution.

Step: 5

Conducting interview for the candidates called for at the institution premises. The interview will be conducted by a panel of members consisting senior staff members department concerned and expert member(s) from the academia or industry.

Step: 6

As a final step, the short listed candidates will be introduced to the Principal and the Chairman. The staff recruitment will be finalized by the Chairman.

PROMOTIONAL POLICY

1. Period of Increment : After completion of 1 year of service.

2. Increment Term : June and December of every year.

3. Process :

Step 1: Preparation of list of staff members who are due for promotion / increments.

Step 2: Review meeting will be conducted with the Chairman, Principal, Manager (HR) and the concerned Head of the Department. The criteria considered for awarding increments and promotions are,

- Self Appraisal system
- HODs evaluation
- API introduced as per UGC
- Other contributions, if any.

4. Promotional Levels :

Teaching : Assistant Professor, Associate Professor, Professor.

Non-Teaching : Based on the departmental needs.

Grievance Redressal Mechanism:

- The management of the college follows an open system of administration and grievances from staff and students are given the utmost attention.
- Complaints and suggestion boxes are kept at a number of places in the campus and also in the hostels.
- The suggestions and complaints are carefully looked into and remedial measures undertaken. Responses are also publicized through notice boards.
- In case of indiscipline, a committee appointed by the principal enquires into the matter by calling witnesses and recommendations are made about the action to be taken by the management.
- Grievances regarding the staff are carefully looked into by the Heads of the Department in consultation with the Principal and remedial measures taken.
- Class Committee meetings are held in which grievances of students are taken note of and remedial measures taken.

File Description	Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

- 1. Planning and Development**
- 2. Administration**
- 3. Finance and Accounts**
- 4. Student Admission and Support**
- 5. Examination**

Answer: All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
Any additional information	View Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Answer:

A example of activity from the minutes of the meeting of Academic Council

The following resolutions are approved by the Academic Council during the discussions:

- It was decided to have new Regulations 2015R from the academic year 2016 onwards for UG programmes as some departments want minor change in their curriculum. The committee advised to convene the BOS meeting of the respective discipline towards the approval of their curriculum and syllabus with minor changes then only academic council will look into that matter. (In respect of First year curriculum guidelines by AICTE and UGC to be ensured)
- The regulation 2015R includes some of the additional components of Choice Based Credit System (CBCS).

Successful Implementation of Choice Based Credit System (CBCS) in Curriculum:

The new Regulations 2015 was implemented for all UG and PG programmes to introduce the Choice Based Credit System (CBCS) in 2015. CBCS enables students to learn at their own pace, choose electives from a wide range of courses, and move towards an interdisciplinary approach in learning by choosing open electives. This was approved by the college Academic Council at a meeting held on 29.07.2015.

According to this regulation, a student admitted based on the higher secondary score is expected to complete the B.E./B.Tech. Programme in 8 semesters (four academic years) but in any case not more than 16 Semesters. The curriculum of the B.E./B.Tech, M.E/M.Tech, MBA and MCA degree programmes is designed to have a total of 170 – 180, 65-75, 95 – 100 and 119 – 125 credits respectively for the award of the degree.

The regulation 2015R was approved by Academic Council at a meeting held on 21.6.2016. This Regulation includes some of the additional components of CBCS. Employability Enhancement Courses in the form of Industrial Training, Internships, Online courses and Industry oriented courses have been introduced in this regulation. Further fine tuning of the Regulation 2015R was done at the Academic Council meeting held on 28.7.2017. The students have registered and are studying the open electives to enhance their Interdisciplinary Technical knowledge.

For providing international exposure for meritorious students, MoUs are signed by Sona College of Technology with foreign universities. Students can utilize this opportunity to do one or two semesters of the courses in foreign universities and the transfer of credits for courses done in foreign universities are facilitated.

Each department of Sona College of Technology shall offer a diploma/ certificate courses (domain related) for UG and PG students for their career skill enhancement. Diplomas and certificates shall be used under the seal of Sona College of Technology. (As per UGC Revised Guidelines for Autonomous colleges 2017, Clause 18.i). CBCS is successfully implemented in the Autonomous Regulation of our college.

File Description	Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 *The institution has effective welfare measures for teaching and non-teaching staff*

Answer:

Teaching staff

- Contribution to Provident Fund
- Contribution towards medical insurance
- Maternity leave
- Medical leave
- Advance to meet emergency expenditure
- Medical centre
- Gratuity
- Personal accident insurance
- Registration fee,TA and DA for attending conferences, workshop... etc

Non-teaching staff

- Uniforms for the support staff
- Financial aid for the education of the ward of supportive staff
- Festival advance
- Fee concessions for children of administrative and support staff
- Bonus for administrative and support staff
- Medical centre
- Contribution to ESI
- Gratuity
- Maternity leave
- Personal accident insurance
- Salary advance.
- Registration fee,TA and DA for attending programs

6.3.2 *Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years*

Answer: 37.8

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
77	157	140	101	129

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc. during the last five years	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Answer: 4.6

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
5	5	6	4	3

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers attending professional development programmes viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programme during the last five years

Answer: 62.44

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
158	255	263	216	110

File Description	Document
Details of teachers attending professional development programs during the last five years	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Answer:

SONA has a structured self – appraisal system for the faculty in place. The faculty needs to make a self – appraisal on the factors given below

Factor 1: Teaching

1. Lectures, seminars, tutorials, practical sessions, contact hours taken are converted into percentage of lectures allotted
2. Preparation and Imparting of knowledge / instruction as per curriculum; syllabus enrichment by providing additional resources to students
3. Use of participatory and innovative teaching-learning methodologies; updating of subject content, course improvement, etc.

Factor 2: Research and Academic Contributions

1. Research Paper Publication
2. Other Research Publications (books, chapters in books, other than refereed journal articles)

3. Research Projects / Grants
4. Research Guidance (In case of joint supervision points are to be shared in 70: 30 ratio)
5. Post-Doctoral Degree
6. Participation in Training Courses/Conference/Seminar/Workshop
7. Training Courses / Conference /Seminar/Workshop Organized
8. Award/ Honours /Recognitions
9. Peer Reviewing of Papers/Project Proposal/Evaluation of Project Completion Report
10. IPR and Patents: Applied, Published and Granted (IPR)

Factor 3: Student Development

1. Student related co-curricular, extension and field based activities (such as extension work through NSS/NCC and other channels, cultural activities, subject related events, advisement and counselling)
2. Contribution to Corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities
3. Professional Development activities (such as participation in seminars, conferences, short term training courses, talks, lectures, membership of associations, dissemination of knowledge and publication of general articles, etc)
4. Membership in profession related committees at state and national level
5. Institutional responsibilities like AICTE Coordinator, NAAC Coordinator, NBA Coordinator, Class Counsellor or any other additional responsibility

Factor 4: Industry Academia Interaction

1. MOU signing by Individual and Department
2. The weightage assigned to various factors vary for the faculty depending on their designation. For example, more weightage for research is assigned to Professors and Associate Professors compared to the assistant professors. Each factor is given a weightage and 90 percent is meant for self – appraisal by the faculty and 10 percent is appraised by the Head of the Department.

Non Teaching Appraisal:

Non – Teaching appraisal is done with standard criteria such as relevant qualification, relevant experience, and number of days present and the longevity of the staff. The above criteria were given 60 points and 40 points were assessed by respective HODs. The average of all is given as grades.

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Answer:

The institution has appointed full time internal auditors (ASTRAL team) and External auditors to audit the following functions

Internal /Concurrent Audits

- The expenditure for staff salary is being audited every month
- The amount incurred towards infrastructure maintenance and purchase of new equipments, consumable items is being audited then and there.
- The expenditure incurred towards organising the programs in institute is being audited.
- The amount spent towards staff development programs attended by the staffs outside of the institution is being audited.
- Identify and assess risks of material misstatement, whether due to fraud or error, based on an understating of the institution and its environment, including the institutions internal control.

- Obtain sufficient appropriate audit evidence about whether material misstatements exist, through designing and implementing appropriate responses to the assessed risks.
- Form an opinion on the financial statements, or determine that an opinion cannot be formed, based on an evaluation of the audit evidence obtained.
- Obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are presented fairly, in all material respects, in accordance with an applicable financial reporting framework.
- Providing reasonable basis for the users to place reliance on financial statements, and
- To comply the various legal requirement.

External/Statutory Audits

- In our institution external audit is being carried out by M/s.R.Srivastan & Co, Chartered accountant, Salem represented by his partner G.Gowthaman, Chartered accountant with their team of audit staff during the period from June to September every year.
- The external team audit the objects as referred the activities of internal audit.
- All the flow of funds of the institution is being audited by the external team and submits audited statement to the management.

Mechanism of settling audit objection:

We have appointed a separate staff in the accounts department to follow up audited activities. If any objections raised by the external auditing team it will be settled then and there.

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropers during the last five years (not covered in Criterion III)

Answer: 1.29

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropers year wise during the last five years (INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1.29405	0	0	0	0

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Answer:

Mobilisation of funds:

- Tuition Fees collected from students
- Grants received from Government and Non-Government organizations.
- Fund generated from R&D, Continuing Education Courses, Consultancy works, and Lab testing for various government and non –government organization.
- The students fees collected is being deposited in the bank and from which Interest earned.

- Interest earned from Endowment deposit with the Directorate of Technical Education (DOTE)
- Short term loan from bank for developing infrastructure and additional lab facilities.
- Also encouraging the faculties and staff for applying various grants and also executing social activities covered under corporate social responsibilities.
- As far as the utilization of resource concerned, the institution has instituted various measures including internal control and internal audits.

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Answer:

The primary goal of the IQAC is to ensure that quality education is offered to the students, enabling them to excel in the fields of Science, Engineering, Technology and Management and to cater to the changing and challenging needs of the society and industry.

The IQAC aims at achieving this goal by initiating lot of quality improvement strategies in Curriculum Development, Faculty Development, Teaching-learning process, Infrastructure development, Research and Development, Placement Activities, Autonomous and Accreditation Process and Co-curricular and Extra-curricular Activities.

The IQAC meets in the beginning of every academic year. The committee discusses and decides the institution level objectives for the current academic year and also conducts an exhaustive review on the status of the achievements of the previous years. The strategies and action plan for the achievement of the objectives is chalked out. The progress of the initiatives and quality reforms are monitored in the consecutive meetings.

Two best practices that have been institutionalized in the institution in the last five years is given below.

1. Internal Quality Audit system:

To ensure an excellent, commendable and well-defined teaching-learning process throughout the institution, for all programs, internal quality audits are being conducted every six months. The internal quality audit evaluates the existing system to determine its conformance to institution policies and objectives, commitments, and regulatory requirements. This also includes a process audit that verifies and evaluates the operation or procedure against predetermined instructions or standards and ensures the following:

- Conformance to defined requirements.
- Examine the resources (equipment, materials, people) applied to transform the inputs into outputs, the environment, the methods (procedures, instructions) followed, and the measures collected to determine process performance.
- Adequacy and effectiveness of the process controls established by procedures, work instructions and process specifications.

The audit covers all vital components of teaching- learning like design and development of PEOs, POs, curriculum & syllabi and Cos, review and revision of PEOs, POs, curriculum & syllabi and COs, assessment of COs and POs, course delivery, continuous evaluation procedure and conduct of University Examinations, result analysis & follow-up action, student-centric learning initiatives, co-curricular activities, professional society activities, extra-curricular activities, student motivation, counseling and grievance redressal etc. The audit effectively identifies all non-conformances and ensures proper corrective actions for the non-conformances. A review committee meeting is conducted after every audit to peruse the results and effectiveness of the internal audit, analyze and evaluate the opportunities for continual improvements and to peruse the adequacy, continuing suitability, sustainability and enhancement of the teaching-learning practices.

2. Learning Resource Centre:

A committee at the department level is constituted to develop a Resource centre. The centre is the repository for subject wise resources which includes course file contents, study material, question bank, reference list, power points, demo methods and material, models, assignment topics, video / animation films, handouts etc. Possible Resources can be stored in CDs for use by faculty and students. Students are encouraged to take MOOC and online courses offered by reputed institutes. In addition to classroom learning, aids like NPTEL, EduSAT, Indo-US, A –VIEW, YouTube, Khan Academy, e-journals, etc. are available for the students to facilitate learning.

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Answer:

The IQAC plays a very active role in inculcating the sense of imparting quality education to the students. The autonomous status of the institution enables us to introduce state-of-art technology in the curriculum and syllabi and to revise them as and when required.

A framework of the curriculum is developed by the respective department for their programmes. It includes a list of courses, course outcomes, and syllabus for the course, prescribed text books and reference books, and the evaluation pattern with weightage for the continuous internal assessment / semester-end assessment. The curriculum is reviewed in the discipline-wise Boards of Studies and the recommendations are tabled at the Academic Council meeting for approval.

A regular assessment of the curriculum is done through the feedback from the stakeholders of the institution i.e. students, alumni, subject experts, employers and the experts from the industry. The suggestions received from the stakeholders are reviewed by the Department Consultative Committee; relevant and innovative suggestions are considered for inclusion in the curriculum. The curriculum and syllabi are revised from time to time. In the process of developing the curriculum, care is taken to ensure adherence to norms and guidelines prescribed by the Anna University, AICTE and UGC.

The curriculum for every program is also designed in a way to achieve the COs, POs and PSOs while satisfying the general and specific requirements of a particular program. A variety of direct and indirect assessment tools are employed to identify the extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes. Feedback from the stakeholders like exit survey, course end survey, Recruiter's feedback, feedback from domain experts from academia and industry are considered to assess the attainment of COs, POs and PSOs.

The college has standard pedagogical practices. The Faculty Record Book (FRB) where the lesson plan, course outcomes, programme outcomes, course delivery details, list of resources developed, etc. are documented serves as a record of all the academic activities. All of Sona faculties are trained in contemporary and innovative methods of teaching by motivating them to attend various programmes on pedagogy. The widely used teaching and learning methods at the institution are lecture, group discussion, quiz, demonstration, drill and practice, case studies, tutorials, team teaching, cooperative learning, seminar, internship, projects/surveys, computer lab, simulation, field / factory visits, games and role play.

Teaching learning reforms facilitated by the IQAC:

1. Lecture Capturing System (LCS):

The Sona College of Technology has implemented the Lecture Capture System, one of the teaching learning processes. It is a **Comprehensive Video-Based Learning Platform** used by our students. The Lecture capture system has been installed in 60 classrooms, covering 8 courses from 8th July 2016.

Lecture Capture system is an automated audio-video recording solution for class room lectures. The LCS system start to record the lectures given by the faculty in the class room as per the time table linked with Impartus software. All the faculties and students are provided with login id credentials. Students are accessing the recorded video lectures and other materials by using internet URL: <http://182.73.107.187/login>, a.impartus.com outside the campus. The students can access the videos through Intranet also, link <http://172.21.1.2/login/> inside campus. The faculties or any student can post there question for discussion in the discussion forum. Totally 315 professors are using the Lecture Capture solutions and 2800 Students are watching the video lectures through laptops, tablets and Android platform.

The assessment of LCS usage of the students is reviewed by the respective faculties with the help of number of students viewed statistics, Karma points, and popularity rank which is available in the software.

2. Moodle:

The Modular Object-Oriented Dynamic Learning Environment, MOODLE, is an open source web application used to create interactive online learning platform. MOODLE is an alternative to proprietary commercial online learning solutions and is distributed free under open source licensing. It is designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environments.

SONA is using MOODLE for various teaching learning activities like conducting Continuous Internal Evaluation Test, online assessments for placements.. etc.

- All the objective type questions for the corresponding subjects will be posted in MOODLE software and the test is conducted periodically.
- Assignment questions are posted and the students are asked to submit through MOODLE.
- Student–centric learning, to practice industry specific cases using MOODLE is adopted for learning and testing through Moodle.
- Laboratory courses are run through MOODLE virtual laboratories.
- Consistent assessment made based on the marks secured by the students and it is linked with internal mark calculation.

All the Students are provide with individual login id and they can access the course contents through mobile, i-pod, laptops and personal computers...etc. from anywhere in the world or from inside the campus by using the URL: <http://182.73.107.190/moodle>

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Answer: 3.2

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
3	3	4	3	3

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

Answer: Any 4 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of Institution	View Document

6.5.5 Incremental improvements made during the preceding five years (in case of first cycle)

Post accreditation quality initiatives (second and subsequent cycles)

Answer:

Quality Enhancement Initiatives (Academics):

Outcome based education

- The departments are accredited by NBA with parameters contributing to outcome-based education.
- Student success is measured in terms of skills acquired in the courses of a programme rather than the results (pass, fail or percentage of marks).
- Each course has outcomes which states the skills to be acquired by the students upon completion of the course.
- Each programme has programme outcomes (POs) which are to be assessed at the end of the programme. The course outcomes (COs) are mapped to programme outcomes as they strongly contribute to the attainment of the POs.
- Direct and indirect assessments are carried out to measure the attainment of POs and COs. The continuous internal assessment and the semester-end examinations contribute to the direct assessment methodology. The course-end survey records, exit-survey records, placement records and employer feedback are used for indirect assessment.
- The attainment of course outcomes is recorded for each semester and necessary follow-up action is taken if any of the course outcomes is not attained. The programme outcomes are assessed and subsequently follow-up action is taken where required.
- To substantiate the attainment of COs and subsequently POs, the question papers of internal assessment tests and semester end examinations follow 50% of lower order thinking questions and 50% of higher order thinking questions. The question papers follow Bloom's Taxonomy to cater to different levels of student thinking skills.
- Both for the internal assessment tests and semester end examinations, the questions papers are scrutinized for the quality by the heads of the departments and senior professors.

Initiatives

- The students are trained to solve a greater number of problems since the assessment pattern includes more of such questions. This improves student problem solving and logical thinking skills.
- The valuation of the answer scripts has been made more uniform across all the examiners evaluating the same course.

- The answer scripts are internally audited in the department to verify the correctness. The answer scripts of semester-end examination are audited by external experts.
- Individual assignment questions are given to postgraduate students. For undergraduate students group assignments are given, each group consisting of 2 or 3 students. The quality of the assignments is ensured to be at the higher level of Bloom's Taxonomy.
- The projects done by the students are product-oriented. Many such projects are awarded by external agencies. To mention a few,
 - An Electrical and Electronics Engineering student group has won the ICTACT Innovation Award for developing a dual power supply set-up incorporating both wind and solar energy.
 - A group of Mechanical Engineering students have designed a race car and participated and won a prize in an SAE contest.
 - A student of ME Communication Systems has won the Best MTech Thesis award from ISTE.
- Many innovative practices in teaching-learning processes have been introduced to improve the learning experience of the students. The following technology-integrated practices have been used:
 - Moodle based assignment evaluation and quizzing
 - Flipped classrooms
 - Seminars and webinars from industry experts
 - Pedagogical training for faculty members by in-house trainers and through ISTE workshops offered by IIT Bombay
 - Online certifications obtained by both students and faculty
 - NPTEL courses and spoken tutorials are offered through intranet for offline learning
 - Blended MOOCs
- The faculty record book has been designed after thorough brainstorming to record all the activities of the teaching-learning processes, from planning, delivery and student assessment to achievement of outcomes for all courses by individual teachers.
- The academic audit process has brought many changes into the system to strengthen the activities such as
 - Constituting examiners for evaluating student performance with both internal and external examiners
 - Inclusion of MIS in computing internal marks and final grades
 - Inclusion of MIS in all the activities of academic system and faculty development
 - Inclusion of MIS in computing the COs attainment
- Many learning resources have been developed by the faculty members themselves.
- To lessen the gap between industry needs and academic delivery, many new courses have been designed by the faculty members in consultation with industries like L&T, Titan Industries, Infosys, IBM and others.
- 8000 user-licenses for Blackboard Learning Management Software are available on the campus for use by faculty and students. Lectures, assignments, videos, animation, etc. related to the courses are uploaded in addition to the quizzes posted on the Blackboard platform. Students can access the platform anywhere as the LMS is hosted in the public domain.
- Students who excel in their studies are appointed, with remuneration, as Peer-Teachers to enhance the learning of their classmates who could do with additional coaching.
- Students with a natural bent for research are allotted to research faculty and R&D centres as assistants in ongoing research projects to provide them with an opportunity to channelize their research potential.
- Relevant industry mentors/subject experts are identified for every course and certain topics are taught by the experts (Through webinars/guest lectures)
- Student-centric learning: To practice industry-specific cases, MOODLE & Blackboard are adopted. Consistent assessment and adaptive tests are conducted using customized MOODLE.
- The curriculum offers credits for employability enhancement courses like industry electives (offered by experts from industries), internships/industrial training and online courses. Credits are given to the students who successfully complete the course assessed by the industry experts.
- Laboratory-integrated theory courses are included in the curriculum to enhance the practical skills of students.
- Placement and Career Enhancement is included as a course in the curriculum itself for the benefits of the students (Soft Skills, Special Aptitude Training, communication skill development)
- Faculty members are also encouraged to take on-line courses offered by NPTEL, Coursera, etc. to upgrade their knowledge and thereby enhance the teaching-learning process.

- Co-curricular activities like Software exhibition, Continuing education programmes, Certification courses like CISCO, IBM certification, Placement & soft skill training, Symposiums, Workshops, Conferences, Guest Lectures / Seminar, Webinars and other Club activities are conducted periodically to improve the overall development of the students
- Research & development: A 'Research Committee' consisting of representatives from every department functions in the college. This committee meets periodically and discusses the various schemes and scrutinizes the proposals suitable for each scheme. All faculty are encouraged to present their innovative ideas, file patents, publish research papers in journals / conferences, and the team helps and guides them in this initiative. Faculty involved in funded research projects are lauded with appreciation and cash awards.
- Industry interaction/collaboration: The institution has an objective every academic year to sign MOUs with industries for mutually beneficial activities like research projects, consultancy and interactive sessions like seminars, webinars and workshops.
- Faculty Advisors (FAs): About 15 students are assigned to each of the FAs, who counsel and monitor their wards' performance, behaviour, attitude and conduct and motivate them to continuously improve themselves in all respects
- Every department has academic coordinators whose responsibility is to ensure the smooth conduct of academic activities in the department.
- Question Bank for every course based on Bloom's Taxonomy: Every faculty has developed a question bank based on Bloom's Taxonomy for every course he/she handles.
- As part of the extra-curricular activities, a diverse range of student clubs are there for holistic student development. Students are also given training for GATE / UPSC and GRE exams.

Quality Enhancement Initiatives (Administration):

- The governing body meets every year to peruse the initiatives taken in the administration and academic activities of the institution. The members provide suggestions which are followed-up subsequently
- The standing committee will discuss the academic initiatives to be implemented in the regulations and curriculum and provide points for discussion during the academic council.
- Different committees like Grievance Redressal Committee, Women Development Committee meet periodically to discuss the issues
- Faculty Leave Management System: A new feature for automatically managing and maintaining the leave particulars of the faculty has been added to the MIS. The faculty will apply for leave through this facility which then will be approved by the Head of the department.
- Biometric system for attendance: The attendance of faculty members is monitored with the help of biometric system which recognizes the person with his/her face or finger prints. Wearing of ID cards and helmets (for those coming by two wheelers) has been made mandatory.
- Online Performance Appraisal System: All the faculty members are expected to feed their self-appraisal data into online Management Information System software which will be used for the annual performance appraisal.
- Online feedback monitoring system: Mid-semester feedback from students on the courses/ faculty is collected every semester through an automated environment which collects and consolidates the feedback received from the students.
- The Dean-R&D reviews the research and development activities in the institution periodically.
- A review of the college canteen operation is being done to ascertain the quality of food served.
- A review of Wi-Fi connectivity for the entire campus including hostel is being done.
- An additional 100 CCTV cameras have been installed for effective campus surveillance.

7. Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Answer: 34

7.1.1.1 Number of gender equity promotion programs organized by the institution year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
5	7	6	7	9

File Description	Document
List of gender equity promotion programs organized by the institution	View Document

7.1.2 Institution shows gender sensitivity in providing facilities such as

a) Safety and Security

b) Counselling

c) Common Room

Answer:

1. Safety and Social Security

Sona College has implemented the following steps for ensuring the safety and security of women on the campus:

- Establishing a Women Empowerment Cell to increasingly involve the women on the campus in organising women-specific programmes and empower them to take on administrative and leadership roles
- Forming a Team of Counsellors for Women Safety at Sona under the auspices of the Women Empowerment Cell to address problems faced by women staff and students
- Being an institutional member of e-WIT (Empowering of Women in IT), which works in collaboration with the Women Empowerment Cell to organise or participate in growth and contributions of women in the IT and ITES sectors of industry
- Organising bus facilities to and from the college exclusively for female students
- Having an exclusive Girls-NCC Wing, besides the Boys NCC Wing
- Ensuring active participation of girls in NSS, Youth Red Cross, Red Ribbon Club and the Sports Teams
- Appointing an exclusive female PD for girls participating in sports and games
- Ensuring the protection and safety of female students by having security guards deployed on the campus specially focusing on this
- Ensuring equal opportunities for female academicians in the campus even for the top posts in the college - to quote just one example, of the 12 heads of departments on the campus, seven are women and the present principal is a woman!
- The college's HR policy also focuses on women's welfare - women have the privilege of a six-month maternity leave, with salary assured for three months.
- Celebrating the International Women's Day: This is a special event for women, of women and by women, celebrated with a true spirit of joy and gaiety where the female staff and students are felicitated, and where women come out on their own to display their unique organisational skills and talent, and where they get to listen to and interact with notable women achievers or celebrities.
- Recognising the 'Best Female Students' on Annual Day: Girls of individual departments displaying all-round excellence in academics, and co-curricular and extra-curricular activities are celebrated along with girls who have excelled especially in co-curricular activities and extra-curricular events.
- Maintaining a good "women-to-male persons ratio" on the campus at around 45:55, it is noteworthy that there is absolutely no gender discrimination in the college.

1. Counselling

- A woman professional Student Counselor is available on the campus to provide personal guidance and counselling to all students.
- A lady doctor is also a part of the college's medical centre for women-specific health issues.
- All of the teaching staff are mandatorily expected to play the role of Faculty Advisors (FAs) for a designated number of students each in their respective departments. About half the number of FAs are women and all of the female students also avail of the periodic counselling.
- The college has appointed a female yoga teacher. The teacher conducts special yoga sessions for all first-year students and for other interested students and staff.

c) Common Rooms

- Common rooms are available exclusively for girls on the campus.

File Description	Document
Link for Additional Information	View Document

7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources

Answer: 6.27

7.1.3.1 Annual power requirement met by renewable energy sources (in KWH)

Answer: 62415

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Answer: 5

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Answer: 17479

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document

7.1.5 Waste Management steps including:

- *Solid waste management*
- *Liquid waste management*
- *E-waste management*

Answer:

General Campus Cleanliness: Sona's housekeeping staff dust the floors of all buildings and pathways daily according to a schedule and keep the campus clean.

Solid Waste

1. Biodegradable organic waste such as plant waste, yard trimmings, food waste, etc is subjected to the composting process.
2. Recyclable paper waste is collected and stored, and sent periodically for recycling to paper mills.
3. A part of the paper waste is used for making light-weight but strong-enough papercrete bricks.

Liquid Waste

1. Around 60000 litres of waste water per day are treated at a wastewater treatment plant set up near the Sona Auditorium. A water treatment plant of capacity 250 KLD is running successfully in the campus, treating both grey and black water originating from the hostels.
2. A certain quantity of the treated wastewater is used for gardening. It is proposed to use the treated wastewater for flushing the toilets across the campus.

E-Waste Management:

Sona's computer maintenance team identifies the e-waste accumulating in all departments on a regular basis and store them in a particular place. The e-waste is then sold periodically to e-waste material vendors.

7.1.6 Rain water harvesting structures and utilization in the campus

Answer:

- Rainwater harvesting systems have been installed and implemented to recharge four bore-well sources of water in the campus.
- Two rooftop rainwater harvesting systems have been installed, by means of which the rainwater passes through a filter medium and infiltrates into the ground.
- Most of the pathways are laid with detachable paver blocks, which allow rainwater to permeate into the ground. The surface gradient is gentle and the runoff is at a slow pace giving ample time for infiltration. There is hardly any stagnation of rainwater in the college campus.
- Plenty of trees and plants make the college campus pleasant and they absorb as much rainwater as possible.
- Four bore-wells with rainwater harvesting installations have been constructed, one each in the Green Building, boys hostel, sports complex and playground. Two separate rainwater-harvesting pits are constructed near the first-year block and harvested rain water is stored for hydraulic laboratories purpose.

7.1.7 Green Practices

- *Students, staff using*
 - a) *Bicycles*
 - b) *Public Transport*
 - c) *Pedestrian friendly roads*
- *Plastic-free campus*
- *Paperless office*
- *Green landscaping with trees and plants*

Answer:

1. Use of bicycles

- Students are encouraged to use bi-cycle within and outside the campus.

2. Use of public transport

- There are three college buses that enable students to travel to and from the college every day.
- Around 3400 students use the public transport system (Salem-city and mofussil buses / trains) daily for this purpose and 100-200 of them walk to the college and back.

3. (i) Pedestrian-friendly roads

Pedestrian-friendly walkways and pavements are aplenty on the campus to encourage the walking habit.

(ii) Plastic-free campus

The college is a plastic free campus.

Paperless office

At Sona, the established principle of 'Reduce-Reuse-Recycle' is very much in practice with regard to the use paper.

- Official college information is disseminated through online facilities like Sona Times (for circulars), Management Information System (MIS) and the FTP, all of which are accessible, by means of an official ID and password, to staff-members within a LAN system on the campus. The MIS houses a complete database of student admission, attendance and academic performance.
- When paper is required to be used, e.g. for printing or writing, eco-friendly paper is used all over the campus. Additionally, one-side printed paper is reused for writing or printing of draft letters or documents is widely used.

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Answer: 6.15

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year wise during the last five years(INR in lakhs)

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
9.78	59.48	118.87	208.18	207.64

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document

7.1.9 Differently abled (Divyangjan) Friendlines Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

Answer: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Answer: 20

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
4	4	4	4	4

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Answer: 71

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
10	18	12	13	18

File Description	Document
Details of initiatives taken to engage with local community during the last five years	View Document

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Answer: Yes

File Description	Document
Any additional information	View Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Answer: Yes

File Description	Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Answer: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Answer: Yes

File Description	Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Answer: Yes

File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Answer: 22

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
4	3	2	7	6

File Description	Document
List of activities conducted for promotion of universal values	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Answer:

- Sona organizes Independence Day celebrations every year. Students and faculty members participate in this function with our Principal's address on working towards a better India. Our students sing patriotic songs as a tribute to our freedom fighters.
- Sona also organizes the Republic Day every year with students and faculty participating in it. Our Chairman hoists the National flag and takes the salute from the March parade consisting of our NCC and NSS students. The function ends with cultural programmes by our students.
- Every year Sona remembers great Indian personalities as follows:
 - It observes two minutes silence on 27th of July every year to remember Former President Dr. A. P. J. Abdul Kalam.
 - It celebrates Teacher's Day to honor the birthday of Dr. Radhakrishnan, Teacher cum Former president of India, in which all the teachers are honored for their dedicated service on 5th September every year.
 - It organizes Youth Day to celebrate Swami Vivekananda's birthday every year on 12th January.

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Answer:

- **Financial Function:**
 - All financial details of Sona College like budgets, expenditure, audited statements, etc. are presented at all Governing Body (GB) meetings of the college, in the presence of GB members and all HODs and key functionaries.
 - A Finance Committee that includes designated HODs meets twice a year to review departmental budgets and finalise allocations yearly.
- **Academic and Administrative Functions:**
 - An online platform called Sona Times provides all day-to-day circulars for staff, notices for students, etc. This site is accessible to all staff, who convey all necessary information to students.
 - Sona Times also provides links to AICTE Approval Process Handbook, Autonomous Regulations and Curricula, Sona Employee Handbook and many others.
 - Sona College website www.sonatech.ac.in gives details about Sona including department details, curricula and syllabi, placement, parent-student portal, rules and regulations, results, etc.
 - The Sona Student Calendar provides information on key activities of our college and is issued to students every year, with a link to it in the college website for universal access.
 - The lecture capture system captures day-to-day lectures given by faculty. The videos are refined by the faculty made available to students for clarifications in any part of the lectures.

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Answer:

PRACTICE - I

1. Title of the Practice: Management Information System (MIS)

The MIS developed and installed in Sona College is fundamentally an educational information system built with a sense of appropriateness and coherence for all the stakeholders of the college.

2. Objectives of the Practice

To provide holistic support in capture, processing, storage and retrieval of relevant, up-to-date and demand-driven data and information for management functions including policy planning and implementation, decision making, monitoring and evaluation of the education system and follow up on the daily activities of each major entity in a streamlined, systematic and timely manner.

3. The Context

The MIS is intranet-based and partially web-based well-established in-house developed software that appropriately handles all the key functionalities of the institution. The set of automated modules that has been successfully implemented are: Admissions, Academics, Students, Fees, Examination, Online Assessment, Placement, Student Feedback, Performance, Staff, Faculty Record Book, Faculty appraisal, Leave Management, HR Management, online ISO Process and Quality manual, Hostel, Events Registration, Dispatch, Resource maintenance, Security, SMS based services, Report Designer supports standard and Ad-Hoc report generation and Third Party Integration. Web Portals are the exclusive system which maintains the vital information online and interlinks all the stakeholders with required authentications. SonaTimes is an online bulletin board that displays Circulars, Technical Events, Regulations and Norms, Departmental events, On-line courses schedule, Festival wishes, Broadcasted News and Contacts.

4. The Practice

MIS framework maintains raw information on the education system and also contains aggregate figures derived from these data, such as internal marks, performance results, appraisal, feedback etc. Instant availability of this aggregate data provides a deeper understanding of the education system. The streamlined standard formats and procedures for data collection and storage eliminate duplicate, redundant and conflicting data. MIS system is robust enough and operates according to a well-defined logic, methodology for varied distinct purposes. Appropriate data flow mechanisms and channels are applied to promote the exchange of derived up-to-date information among the stakeholders. The inter-relation between the modules promotes data presentation and data interpretation standards. The precise data and graphical reports are produced wherever required to support in-depth understanding. Regular data and source back-up facilities are maintained. All the data and information are maintained as a history due course for further references.

5. Evidence of Success

Accessibility of appropriate information as required by different stakeholders (derived internal marks at any point of time); Single point instant data capturing, role-based access control and time-based locking mechanisms (instant access of attendance status, examination score etc.); Standard and Ad-hoc data analysis reports (Faculty record book, student performance analysis, meet out accreditation standards etc.).

6. Problems Encountered and Resources Required

In order to meet the institution's vision of nurturing the students in a holistic way the MIS system has to address the qualitative characteristic of the students. It is required to develop a module on SWOT analysis for capturing individual student's Strengths, Weaknesses, Opportunities and Threats in the first year itself. A knowledge based mechanism intended to implement will address these soft qualities suitably and thus incorporating planned processes and follow-ups will achieve the vision of holistic growth of the student community.

Practice II

1. Title of the Practice: Continuous Assessment and Monitoring of Academic Performance

2. Objectives of the Practice

- To train faculty in the outcome-based education (OBE) concept and enable them to develop and assess programme and course outcomes.
- To develop a clear system for the assessment of student learning meeting industry requirements of knowledge and skills.
- To disseminate the assessment system to all concerned for proper implementation.
- To continuously assess student academic performance every semester.
- To periodically monitor student academic performance and ensure maintenance of academic assessment standards through academic audits.

3. The Context

Students admitted to the first year BE/BTech programmes belong to a diverse background with regard to place of origin, school education, etc. Such a varying group of incoming students calls for effective educational and assessment methods.

Sona has striven to address these requirements and evolve education and evaluation systems that bring out the best in students.

4. The Practice

The practice began in 2010, with Sona becoming autonomous. The existing credit system of curricular design and continuous assessment of student learning was refined to be more in tune with autonomous requirements, with an Academic Council, Department-wise Boards of Studies and a Controller of Examinations in place.

In 2012, all faculty were provided with an introductory exposure to outcome-based education (OBE), a concept that NBA had just introduced.

In 2015, UGC mandated the introduction of Choice-Based Credit System (CBCS) to give Sona the opportunity of further refinements in the education and assessment systems.

During the last three years, a refined system of setting stimulating question papers to Sona standards (blueprint) and designed to assess individual course outcomes has come into regular practice.

Periodic monitoring of student academic performance was also simultaneously developed and refined to include root-cause analysis of the assessment results, remedial classes for slow learners, and so on.

The present practice of Continuous Internal Evaluation at Sona has the following components per course:

- Three written tests, each covering about one-third of the syllabus
- One online test consisting of one-mark questions
- Two assignments, of which one may be a seminar
- Student attendance in the course concerned.

The COE's Office role is to organise,

- Setting of question-papers (QPs) by both internal and external faculty
- Scrutiny of the QPs by the HOD concerned
- Valuation of the answer-scripts
- Entry of marks for individual students in the MIS Module
- Placing the results before the Results Passing Board for final approval
- Securing the valued answer-scripts for any future reference

5. Evidence of Success

- All faculties are now good at developing outcomes, setting question papers to Sona standards and assessing achievement of outcomes.
- Faculty have a complete record of the courses they teach from outcomes to student academic performance and monitoring of their performance.

- Student attendance has improved.
- Better marks in tests and examinations, indicating better learning.
- Students are in regular touch with academic activity.
- Results Passing Board ensures fairness in evaluation within the framework of rules.

6. Problems Encountered and Resources Required

- Initial resistance from the students due to mid-stream changes in assessment procedures mainly arising from the changeover first to autonomy and then to CBCS.
- Faculty coming to terms with the demands arising from raising the assessment standards.
- Difficulty in balancing academic workload due to special classes.

File Description	Document
Any additional information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Answer:

Meeting the global standards to achieve excellence is one area where Sona has a strong focus. Effective Teaching - Learning Process and ambience for Research and Development help us to achieve the Vision.

Programmes of Global Standards

- Sona has a reputation as a provider of quality technical education. It offers a wide range of 7 UG and 14 PG programmes and training opportunities to a wide cross-section of students from across the country and beyond.
- The institute inculcates in students the skills to become effective learners, critical thinkers and responsible citizens who will be able to meet the challenges of the future. All the students have ample prospects to perform well and excel in their chosen fields.

Effective Teaching - Learning Process

- **Choice Based Credit System**
 - The Board of Study and Academic Council meet twice a year to advice and suggest innovative methods to implement the Choice Based Credit System effectively.
 - Owing to the flexibility of the Choice Based Credit System, the programmes have interdisciplinary electives, core and soft skills courses.
 - Sona adopts a well-structured Choice Based Credit System. The electives offered cater to the industrial needs.
 - The Academic Council has framed stringent regulations to ensure that the students undergo industrial training and internship and obtain the stipulated credits.
 - The programmes also include soft skill and aptitude courses from the first semester to sixth semester guaranteeing the students' success at company placement drives.
 - Every department has Adjunct faculty from reputed industries, institutions and international universities to take specialised courses. Professor Simarjeet Saini of Waterloo University is one of the Adjunct faculty of the ECE department.
- **Significant Features of Course Delivery**
 - All the academic efforts converge on the successful promotion of Outcome Based Education. In addition to the classroom teachings, Sona has the following hi-end technical facilities to ensure quality knowledge dissemination:

- **Blackboard Learning Management Software**

- 8000 user-licenses for Blackboard Learning Management Software are available on the campus for use by faculty and students. Lectures, assignments, videos, animation and quizzes are uploaded and posted on the Blackboard platform.

- **Lecture Capture Systems**

- Lecture Capture Systems (LCS) are installed in 60 class rooms in the college. More installations are in the pipeline. The lecture sessions are posted (after necessary editing) on the LCS portal to be viewed by students any number of times.

- **MOODLE**

- Consistent assessment and adaptive tests are conducted using customized MOODLE. Laboratory courses are run through MOODLE virtual laboratories.

Research and Development

- In Sona College, 36 centers are functioning which includes 23 R& D centers, 9 training centers, 2 publication centers, 2 consultancy & technology development centers focus on applied research in the emerging areas ranging from Nano Science to Textile and Garments Technology. The proposals submitted by the research centers are approved and funds are sanctioned by funding agencies like UGC, DST, etc, Sona College has been accorded Recognition as a **Scientific and Industrial Research Organization (SIRO)** by the Department of Scientific and Industrial Research (DSIR), New Delhi.

Extended Profile

Programme

Number of programs offered year wise for last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
21	19	19	19	18

Number of all programs offered by the institution during the last five years

Answer: 21

How many self-financed Programmes does the institution offer

Answer: 21

Number of new programmes introduced during the last five years, if any

Answer: 3

Number of UG programmes offered by the College, which are not covered under the Autonomous status of UGC

Answer: 0

Number of PG programmes offered by the College, which are not covered under Autonomous status of UGC

Answer: 0

Whether the College is offering professional programme

Answer: Yes
Student

Number of students year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
4652	4823	4858	4889	4858

Number of outgoing / final year students year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1321	1445	1381	1414	1348

Total number of outgoing / final year students

Answer: 6909

Number of students appeared in the University examination year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
1375	1539	1467	1493	1389

Number of revaluation applications year wise during the last 5 years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
2320	1869	2159	2324	3019

Academic

Number of courses in all programs year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
792	792	766	733	733

Number of courses offered by the institution across all programs during the last five years

Answer: 3816

Number of full time teachers year wise during the last five years

Answer:

2016-17	2015-16	2014-15	2013-14	2012-13
341	327	322	307	307

Number of full time teachers worked in the institution during the last 5 years**Answer:** 1604***Number of teachers recognized as guides during the last five years*****Answer:** 69***Number of sanctioned posts year wise during the last five years*****Answer:**

2016-17	2015-16	2014-15	2013-14	2012-13
341	327	322	307	307

Total number of publications during the last 5 years, which are included in online databases such as SCOPUS, web of science or PubMed/ Indian Citation Index**Answer:** 692**Institution*****Number of eligible applications received for admissions to all the programs year wise during the last five years*****Answer:**

2016-17	2015-16	2014-15	2013-14	2012-13
1140	1252	1522	1111	1064

Number of seats earmarked for reserved category as per GOI/State Govt rule year wise during the last five years**Answer:**

2016-17	2015-16	2014-15	2013-14	2012-13
1977	1977	1827	1771	1733

Total number of classrooms and seminar halls**Answer:** 137***Total number of computers in the campus for academic purpose*****Answer:** 1758***Total Expenditure excluding salary year wise during the last five years (INR in Lakhs)*****Answer:**

2016-17	2015-16	2014-15	2013-14	2012-13
2051.49	1744.58	1508.09	1988.81	2434.57

Annual lighting power requirement (in KWH)

Answer: 349583

Annual power requirement of the institution (in KWH)

Answer: 995328

Conclusion

Additional Information :

1. In extended profile, Section No.4 -Institution, two questions relate to number of eligible applications. We like to state that our college admits students via two options.
 - Counselling through Government of Tamilnadu (Single Window System)
 - Management seats filled by the Association of Management of Coimbatore Anna University Affiliated Colleges.
 - In both the cases, we have no data on the number of applications received, since applications are received by Tamilnadu Government/ Management Association. It is for this reason we have reported as 0.85, which will be far lower than the actual figure.
2. In spite of compressing the file size to 2 MB, specified by NAAC, we found it difficult to include all the evidence in support of our data called for by NAAC.

Concluding Remarks:

- The college is very much on the right track to becoming an institute of national repute and gaining international recognition as well.
- The faculty and staff work as one team and are sharply focussed on raising the standard of the college to great heights.
- The students are trained and nurtured to become responsible citizens of the future.
- The management is very active and supportive of all the initiatives taken in the college. This itself will provide the greatest impetus to the college to attain international recognition by the 3rd Cycle of NAAC.

Terms and Conditions

☐ I hereby declare that the above mentioned information are true and correct to the best of my knowledge and belief.

Submit SSR