# **SELF STUDY REPORT**

## FOR

## **1<sup>st</sup> CYCLE OF ACCREDITATION**

## AURORA'S SCIENTIFIC TECHNOLOGICAL AND RESEARCH ACADEMY

BANDLAGUDA, KESAVAGIRI POST, CHANDRAYANGUTTA, HYDERABAD TELANGANA 500005 500005

www.astra.edu.in

Submitted To

## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

## BANGALORE

## February 2018

## **1. EXECUTIVE SUMMARY**

## **1.1 INTRODUCTION**

Aurora's Scientific Technological & Research Academy was established by Ravi Rishi Educational Society in the year 2000. This academy is the largest of its kind in the Hyderabad city to have an exclusive and sprawling campus of 25 acres. The campus is located at Bandlaguda, Chandrayangutta which is at a reachable radius of 20 Minute drive from any corner of Hyderabad city.

The college is approved by the AICTE and affiliated to JNTUH It first commenced with the departments of Computer Science and Engineering, Electronics and Communication Engineering and Information Technology with an intake of 60 in each to offer B.Tech. Program. To day the academy has grown far folds offering 05 B.Tech programs and MBA program.

The basic philosophy of the institute can be summed up as "To be a Center of Learning, excelling in Academics, which imparts state of the art knowledge to its students, encourages staff to actively take up Research & Development activities and to be an agent of promotion of ethical values and thus serve the society".

#### Vision

#### Vision

Aurora envisions to make itself synonymous with learning'. We aim to equip our students with a perfect combination of profound knowledge with humane values

#### Mission

#### Mission

- The academy is devoted to academic distinction, research, scholarship and service.
- The Academy's hallmark is a cultural engagement that bridges theory with practice extends the learning process beyond the classroom and promotes students' growth and culture.
- The mission of teaching faculty is dedication to excellence in teaching and the development of a fertile environment exemplified by a free exchange of ideas, high academic expectations and individual responsibility for academics success and achievement

## **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

#### Institutional Strength

These are the attributes of the college that likely will be helpful to and have a positive effect on the achievement of the institutional goals. The main identified current strengths of the institute, on which it can rely to pursue its further objectives include the following:

- 1. These are the attributes of the college that likely will be helpful to and have a positive effect on the achievement of the institutional goals. The main identified current strengths of the institute, on which it can rely to pursue its further objectives include the following:
  - 1. Good reputation in state and region
- 2. Based on outcomes
- 3. Recognition and respect of the institute among its peers
- IT infrastructure/video lectures
- Good research facilities
- Engineering outreach
- Good library facility
- Good sports facilities
- Luxurious and comfortable transportation facility to all students and staff
- Infrastructure
- The College strives to educate morally sensitive leaders for future generations.
- It comprises of Guest Lectures, Student Seminars, Adjunct Courses and Learning Groups. Student seminar topics are prescribed to the students from referred journals available in the college library.
- Teaching learning process
- Technical competence
- Student handbook
- Focus on practicality
- High student pass rate
- Quality and adaptivity of the curriculum
- Availability of scholarships to both poor as well as meritorious students
- Excellent placement for our graduates
- Other than the university curriculum, GATE and IES syllabus is covered
- Quality education
- 2. Human Resource
- Excellent and dedicated student-centered faculty
- Many "mid-career" faculty in their prime

#### **Institutional Weakness**

#### WEAKNESSES

These are the attributes of the college that likely will have a negative effect on achievement of the institutional goals. Areas that need improvement, as currently seen by the faculty, staff and students, include the following:

- 1. Lack of Financial Resources
- Multiple budget cuts and budget holdbacks
- · Lack of good health care programs
- No start-up packages for faculty
- 2. Student limitations
- Students: too demanding and restrictive
- Not enough "resources" to meet the diverse range of students

• Co-curricular activities are not being much concentrated because of the tightly coupled university's weekly schedule.

- Provides no incentives to students to achieve institutional goals.
- 3. Academic Programs
- Low availability of elective classes
- Have underperforming departments
- · Lack of summer/winter courses because of the university's tightly constrained almanac.
- Swinging pendulum from teaching to research
- · Limited course offerings
- Very large class sizes

#### **Institutional Opportunity**

#### OPPORTUNITIES

These are the conditions external to the college/ that likely will have a positive effect on achievement of the institutional goals. The main identified opportunities resulting from the above assessments include the following:

1. Internal

- Research collaboration
- Teaching with teams
- Opportunity to build new buildings
- Streamline curriculum
- · Increase involvement in energy/environmental sustainability
- Have flexibility in faculty recruitment (twice in a year. June/Dec
- · Develop more cross-disciplinary research
- Low level of R&D in the industry. Hence in-house R&D to be encouraged
- Expand research into new areas
- · Scope for providing consultation, training and innovative developments
- Possibility to start new programs
- Web classes 100% pass percentage
- Assured placements for all eligible students

• IT tools are becoming available for technology enhanced learning, for widening the reach and improving the effectiveness of engineering education.

- 2. External
- Establish relationship with other Universities
- More networking with industry
- Could make more use of alumni
- · Research collaboration with Industrial Initiatives

• Changes in Government policies provide opportunities for structural change, greater autonomy, flexible approaches and increased focus on post-graduate education.

 $\cdot$  More conversations and partnerships with local employers – those in the private, non-profit, and public sectors. So that our students are more appealing to them

Become a leader in interdisciplinary and integrated learning

#### Institutional Challenge

These are the conditions external to the college that likely will have a negative effect on achievement of the institutional goals.

- 1. Internal
- Not prepared to meet new challenges
- Losing faculty because of the competition, no resources to replace them
- Diversity of opinions reflected in faculty and industry
- Outreach: if we don't do it, others will
- Insufficient resources to focus on quality education
- Increased enrolment without more funds
- Erosion of the quality of undergrad programs
- Grade inflation
- Student expectations-think they are better than they are
- Research challenges that faculty project are
- Budget "Gap"
- New vision of future (downsizing)
- Inability to recruit diversified faculty
- Staff Retention issues
- 1. External
- Too many engineering colleges for one state
- Lack of overall support for technical education by the government
- Government regulations and practices in the areas of autonomy, tuition fees, and admission procedures.
- Poor economy
- Increased availability of other attractive employment opportunities
- Competing programs of engineering around state
- Some students prefer low-cost, low-quality undergraduate/postgraduate programs for quick and easy credentialing which results in degrading of education system.
- Conflict in the metrics maintained by individual institutions.
- Outsourcing/off-shoring of engineering positions and engineering education
- The work of engineers has been marginalized and is being done by "non-engineers"
- Foreign universities attracting students abroad for postgraduate programs.
- Because of the high salary packages being served to software professionals, pass out graduates/post graduates are less inclined towards teaching sector.

## **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

ASTRA has been implementing Outcome based Education (OBE) since 2014 and the OBE based curriculum assessment tools are employes for respective assessments. The colleges follows a well structured procedure for the same. JNTUH curriculum meets the standards as prescribed by AICTE, Professional Bodies and other regulatory agencies. Apart from the prescribed syllabus, the college takes utmost care to incorpoarte content beyond the syllabus, adjunct and certifiaction courses and value added courses to bridge the curriculum gaps. The elective / CBCS system is well followed as per the affiliating university academic regulations. Any new courses introduced by the university as thoroughly analyzed and the corresponding session plan, course file and the course outcomes are established. Along with the prescribed curriculum, the colleges gives utmost importance to the cross cutting issues relevent to gender, Environment and Sustainability, Human Values and Professional Ethics etc. into the curriculum by organizing seminars and workshops apart from the prescribed university syllabus. Converting the theoritical knowledged gained into the practical aspects is made mandatory to all the students in the campus through field projects/ mini projects and internships. Internships are known for giving students the opportunity to apply their knowledge in real world environments. At the same time, they will also develop skills which will help them perform better at their jobs.

#### **Teaching-learning and Evaluation**

The college is confined to the admission guidelines as per the Telangana State Council for Higher Education and the A category admissions (through EAMCET) is hence open to only the studnets of Telanagana and Andhrapradesh. The seats are filled as per the reservation policy of our State. However the B Category admissions are done on merit basis only.

After two weeks of student admission, a diognostic test is conducted to assess the learning levels of the admitted students. Accordingly they are categoried as advanced and slow learners. There upon, the alloted mentors closely monitor them for the progress based on the proportional support given by the college. For each faculty, 06 studnets are assigned for mentorship. The college provides all the required facilities for the differently abled students and also provides special care in all means.

The Teaching-Learning methodology at Aurora follows the blend of Conventional, Interactive, Experimental and supplementary Teaching-Learning Process. By bringing real-life context and technology to the curriculum through experiential Teaching-Learning Process through internships and major projects, students are encouraged to become independent workers, critical thinkers, and lifelong learners.

Also, the college has excellent teaching faculty with an average experience of seven years. They are active in academics, Research as well as extention activities. The college employs robust centralized international evaluation system which is continuous as well as transparent. The college strictly adheres to the academic calendar for the conduct of CIE.

#### **Research, Innovations and Extension**

The college has active and young faculty inclined towards Research, consultancy and extention activities. The Research and Development cell of the college is being headed by Dean R&D who closely monitors the progress of various Research based activities and bench marks the outcomes of the same. The college has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of

knowledge. Faculty who are persuing PhD are encouraged to upgrade their skills and publish papers in reputed Journals. Also, to have an awareness on patenting and Copyrights, the college regularly conducts workshops on Intellectual Property Rights (IPR) and Industry-Academia best Innovative practices. The faculty excelling in Reseach work are encouraged by the college management giving special incentives. 06 faculty members were awarded with Doctoral degrees this year. The research activity is progressive and proactive with nearly 300 publications. 100 plus Funded projects worth have been sanctioned and many of them have been successfully completed.

Good number of papers were published in reputed Journals notified on UGC website as well as National and International conferences. Also, the college has good linkages with industry for internship, industrial visits, field trips, on-the-job training, research, etc

#### Infrastructure and Learning Resources

Our college encompasses a well maintained campus spread over 25 acres of land being the largest campus in the Hyderabad corporation limits. The institution has adequate facilities for teaching-learning. viz., classrooms, laboratories, computing equipment, etc. Each of the classrooms and the seminar halls is equipped with ICT - enabled facilities such as smart class, LMS, etc. All the laboratories and computer center are equipped with latest equipmnet and software. Apart from the academic facilities, the college has excellent facilities for sports, games (indoor, outdoor) gymnasium, yoga centre etc. and cultural activitie. Adequate budget is allocated for the upgradation of these aforesaid facilities by the college. The learning resources, espicially the library is fully automated using the LMS software. Our library is equipped with various e- learning resources which contain NPTEL videos, NPTEL Web courses, e-Books. **SONET** (Society for Networking in Engineering and Technology) CDs and DVDs are maintained separately for easy access by the students. D- Space Software DIGITAL LIBRARY is also available which contains e-books, E Question Papers, Syllabus, Lab Manuals etc for the benefit of the students and Staff. All the students and staff are encouraged to access the library.

A serene green campus sets an ambience for peaceful learning. All the college instructutional, administrative and amenities are well maintained through the well established systems and procedures with the help of the college maintenance cell and the sub staff.

#### **Student Support and Progression**

As per the existing State Government policy for encouraging economically backward students, fee reiumbsuremnet scheme is applicable to the studnets who are admitted through the Convenor EAMCET. Apart from those studnets, econimically backward studnets are supported by the means of freeships and scholarships by the college management. This welfare measure has benifited good number of studnets and helped them to succesfully graduted irrespective of their financial constraints. All the studnets in the college are ably supported by providing special training for compititive examinations, career counselling, soft skill development and various other personality development matters. They are ably supported by the Dean Student affiars in all the student related greviences by means of established redressal procedures.

With the help of the college training & placement cell, 52% of the eligible graduating students of various batches were succesful in getting palced in various reputed organizations. Nearly 18% of the graduates of the

2017 passing batch have taken admission in higher educational institutions to persure Masters degrees. Apart from the academics, our students were active in participating in various technical, cultural and sports compititions within and outside the college. Also, the college encourages the presence of Student Council & representation of students on academic & administrative bodies/committees of the institution. The college alumni are succesful witness in various spehres of life. Apart from their busy schedule, they have been significantly contributing to the development of the institution through financial and non financial means.

#### Governance, Leadership and Management

The Management of our college is assisted by the College Governing council, Director, Principal, Deans, Heads of the departments and various colelge level coodinators. With such an organizational structure operating in heirarchy, the college maintains transparancy in governance thus showing the reflective nature of the leadership. College follows the decisions taken in the meetings of the Governing Council/ Academic council/ College Development Committee/ IQAC. Also the colleges follows the defines procedures and policies for the functionality of various bodies and committees in the college. Apart from the conventional functionality, the college also practices e- governance in various aspects of adminstration.

The college has taken up various welfare schemes as suggested by the Governing council and the staff welfare committees as per the needs of the staff. Faculty development programs, training programs are regularly conducted for the benefit of the faculty. In order to meet the standards of Higher Education, Aurora's Appraisal System (AAS) is developed in a systematic way to assess a faculty's job performance and productivity in terms of key performance indicators (KPIs). Along with the KPI score obtained though the self appraisal by respective faculty, peer appraisal, appraisal by Head of the department and appraisal by Principal are also weighted.

The IQAC of the College is involved in strengthening the quality policies for Teaching-Learning, Research, Curriculum analysis and implementation, Student activities, innovation, extra- curricular and co-curricular activities. The institution regularly reviews the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

#### **Institutional Values and Best Practices**

#### Some of the best practices of the college include:

- 1. Outcome based education
- 2. Value based education
- 3. Promotion of Research
- 4. Practice of conducting Guest lectures, Industrial visits and Industrial training

- 5. Practical orientation is supported through Mini-projects, Technical seminars. Internship is made mandatory
- 6. Membership in various professional bodies like IEEE, CSI, ISTE, IE,
- 7. Each classroom is equipped with ICT facilities
- 8. Gold medal to college topper at convocation
- 9. Common uniform to both boy's and Girl's promoting gender equity

All faculty members prepare course files, lesson plans and laboratory manuals for each subject for effective teaching-learning process. All efforts are made to maintain the quality sustenance in curriculum delivery to achieve our vision, COs, PSOs, and POs.

Course files are prepared by faculty which includes:

- Syllabus copy with text books and reference books
- Academic calendar
- Course time table
- Course Outcomes
- Handouts and Lecture notes
- Question papers of Internal Examination Tests, additional Tests and assignments
- University question papers of present and previous two years
- Content beyond syllabus

## **2. PROFILE**

## **2.1 BASIC INFORMATION**

Name and Address of the College							
Name     AURORA'S SCIENTIFIC TECHNOLOGICATION       AURORA'S SCIENTIFIC TECHNOLOGICATION       AND RESEARCH ACADEMY							
Address Bandlaguda, Kesavagiri post, Chandrayan Hyderabad Telangana 500005							
City	Hyderabad						
State	Telangana						
Pin	500005						
Website	www.astra.edu.in						

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Principal	Srilatha Chepure	040-64573435	91006666666	040-2444316 3	astrad9@gmail.co m				
IQAC Coordinator	R.Maheshpra bhu	040-27666339	9100000719	040-2444316 4	dr.rmaheshprabhu @gmail.com				

Status of the Institution	
Institution Status	Self Financing

Type of Institution					
By Gender	Co-education				
By Shift	Regular				

<b>Recognized Minority institution</b>	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	19-06-2001

State		University nam	e	Document	
Telangana		Jawaharlal Nehru Technological View Document University			
Details of UGC 1	recognition				
Under Section	]	Date	V	view Document	
2f of UGC					
12B of UGC					
	•				
Details of recogn AICTE,NCTE,N		• • •		se .	
Statutory	<b>Recognition</b> /A	App Day,Mont	h and Validity	in Remarks	
Regulatory Authority	roval details itution/Depar nt programm	tme yyyy)	m- months		

No contents

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes
If yes, has the College applied for availing the autonomous status?	Yes

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?	No

Location and Area of Campus									
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.					
Main campus area	Bandlaguda, Kesavagiri post, Chandrayangutta, Hyderabad Telangana 500005	Urban	22	356020					

## **2.2 ACADEMIC INFORMATION**

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current	Academic year	)	
Programme Name of Pr Level ogramme/C ourse		Duration in Months	5		Sanctioned Strength	No.of Students Admitted	
UG	BTech,Civil Engineering	48	XII or equivalent	English	60	60	
UG	BTech,Comp uter Science And Engineering	48	XII or equivalent	English	120	118	
UG	BTech,Electr ical And Electronics Engineering	48	XII or equivalent	English	60	32	
UG	BTech,Electr onics And C ommunicatio n Engineering	48	XII or equivalent	English	120	84	
UG	BTech,Mech anical Engineering	48	XII or equivalent	English	60	31	
PG	MBA,Master Of Business Administrati on	24	Degree	English	90	24	

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	Professor				ciate Pr	ofessor		Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	,	8		1	1	28		1	1	266
Recruited	5	3	0	8	16	12	0	28	173	93	0	266
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				8				28	J			266
Recruited	5	3	0	8	16	12	0	28	173	93	0	266
Yet to Recruit			1	0				0				0
	1								1			

Non-Teaching Staff									
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government	7	-		91					
Recruited	36	55	0	91					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				91					
Recruited	36	55	0	91					
Yet to Recruit				0					

		<b>Technical St</b>	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				56
Recruited	49	7	0	56
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				56
Recruited	49	7	0	56
Yet to Recruit				0

## **Qualification Details of the Teaching Staff**

	Permanent Teachers									
Highest Qualificatio n	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.	5	3	0	3	0	0	6	0	0	17
M.Phil.	1	1	0	1	1	0	0	2	0	6
PG	5	3	0	16	12	0	173	93	0	302

	Temporary Teachers									
Highest Qualificatio n			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 Qualificatio n	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	Male	Female	Others	Total			
engaged with the college?	12	4	0	16			

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
UG	Male	235	3	0	0	238
	Female	94	0	0	0	94
	Others	0	0	0	0	0
PG	Male	11	2	0	0	13
	Female	11	0	0	0	11
	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	0	30	67	39
	Female	0	12	29	30
	Others	0	0	0	0
ST	Male	0	17	31	29
	Female	0	3	7	6
	Others	0	0	0	0
OBC	Male	0	192	303	183
	Female	0	67	86	63
	Others	0	0	0	0
General	Male	0	112	143	144
	Female	0	50	55	46
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		0	483	721	540

## **3. Extended Profile**

### 3.1 Program

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

Response : 2074

Number of self-financed Programs offered by college

**Response : 6** 

Number of new programmes introduced in the college during the last five years

**Response : 7** 

#### **3.2 Students**

#### Number of students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1284	1898	2263	2146	2025

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

2016-17	2015-16	2014-15	2013-14	2012-13
801	948	948	840	744

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

2016-17	2015-16	2014-15	2013-14	2012-13
195	531	689	518	335

#### Total number of outgoing / final year students

Response : 2268

### **3.3 Teachers**

#### Number of teachers year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
401	521	344	295	165

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

2016-17	2015-16	2014-15	2013-14	2012-13
401	521	344	295	165

#### Number of sanctioned posts year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
401	521	344	295	165

#### **Total experience of full-time teachers**

Response : 13138

Number of teachers recognized as guides during the last five years

**Response : 2** 

Number of full time teachers worked in the institution during the last 5 years

Response : 387

### **3.4 Institution**

Total number of classrooms and seminar halls

**Response : 62** 

#### Total Expenditure excluding salary year-wise during the last five years ( INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
1354	988	726	916	850

Number of computers

**Response : 710** 

Unit cost of education including the salary component(INR in Lakhs)

**Response : 1.1** 

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 0.45

## 4. Quality Indicator Framework(QIF)

## **Criterion 1 - Curricular Aspects**

### **1.1 Curricular Planning and Implementation**

**1.1.1** The institution ensures effective curriculum delivery through a well planned and documented process

#### **Response:**

The institution ensures affective curriculum delivery through a meticulously planned and well implemented process as documented below:

- Immediately after the completion of a semester, HODs conduct a meeting with all department faculty members and discuss about the next semester subjects. Subject willingness is collected from all the faculty members and the subjects are allotted according to their area of specialisation and skill matrix. Department workload is preapred after the subject allocation.
- Class, faculty and laboratory time tables are prepared well before the commencement of a semester along with the Acedemic calender. It comprises of instruction, assignment submission dates, student seminar schedule, project submission schedules, department/Institution level curricular, co-curricular and extra curricular activities, internal examination schedule, university end examination schedule and holidays.
- Each faculty prepares session plan (theory/practical/ mini-project/major project) for the subject alloted according to the JNTUH syllabus taking into account the following aspects:
- 1. It takes into account the number of teaching days available in the semester and division of syllabus of each subject into topics, sub-topics and units. Student centric teaching learnong methods are also included in session plan. The number of instructional and tutorial hours required for completing the syllabus is given based on past experiences of the faculty.
- 2. In case of theory subjects, content beyond the syllabus is identified and additional topics are identied to be discussed in the classroom based on specific requirements and recommendations.
- 3. In case of practical subjects, additional experiments are identified to be conducted based on specific requirements.
- 4. It is implemented by faculty, monitored periodically by the HOD and verified by the Principal every month.
- Also, an extensive lecture notes are prepared and verified by respective HOD. Faculty are encouraged to impart the curriculum through innovative teaching methods such as PPTs, assignments, discussions, workshops, seminars along with traditional teaching methods. Also, laboratory manuals are prepared so that students can do advance plans and correlate with theory.

- Each Faculty maintains course file which contain all the information necessary for the implementation of the action plan.
- Respective HOD reviews the syllabus coverage once in two weeks and reports the same to the Head of the institution. Random verification by principal . A college level monthly review meeting is conducted with all the HODs and dean academics to analyse the same. Necessary measures are taken in case of subjects where in syllabus completion is found to be lagging in comparison to that of the session plan. Also, Students' attendance, syllabus status for each subject is verified.
- Respective HOD takes feedback from the students twice in a semester regarding the difficulties faced by them and issues like ambiguity and relevance of the topics in the syllabus and helps the students to deal with them. A regular system of obtaining students' feedback helps in improving the learning outcomes. The consolidated feedback is submitted to the Principal for necessary actrion.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

#### **1.1.2** Number of certificate/diploma program introduced during the last five years

#### Response: 118

#### 1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
19	23	34	26	16

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document
Any additional information	View Document

#### **1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/** Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

#### Response: 8.11

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13	
8	8	7	3	2	

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

#### **1.2 Academic Flexibility**

**1.2.1** Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

#### Response: 32.74

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

Response: 679

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document
Any additional information	View Document

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

#### Response: 100

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

#### Response: 06

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Any additional information	View Document

#### **1.2.3** Average percentage of students enrolled in subject related Certificate/ Diploma programs/Addon programs as against the total number of students during the last five years

#### Response: 54.19

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs yearwise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1047	1098	818	1098	896

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	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

#### **Response:**

Utmost care is taken by the institution to integrate cross cutting issues relevant to gender, Environment and Sustainability, Human Values and Professional Ethics etc. into the curriculum by organizing seminars and

workshops apart from the prescribed university syllabus.

#### a) Gender Sensitization

Apart from the Gender Sensitization subject prescribed by the affiliating university, seminars, debates and guest lectures talks were organized in the issues related to Gender sensitization. Various events were celebrated to encourage boys and girls to participate and understand the Role of a citizen for women empowerment. Expert lectures were conducted to have an awareness on the opportunities provided by Government to encourage women in science and technology. They are:

- 1. International women's Day
- 2. National Girl child day
- 3. Beti bacho beti pado
- 4. Women safety
- 5. Health and hygiene
- 6.Legal rights of women
- 7. Self defense training program for Girls

#### b) Environment and Sustainability

Environmental studies as a subject is taught in the university syllabus for all undergraduate courses. Apart from this, the college nature club has conducted the following activities as an initiative to protect environment:

- 1. Guest lectures on environment protection
- 2. Measures Eco friendly campus
- 3. Reduce, recycle and reuse for green campus
- 4. Paperless (circulars/ notices) office
- 5. Prohibition of plastic cover
- 6. Segregation on dry and wet waste
- 7. Rain water harvesting pit

Models and posters are displayed in the campus educating the students on the above mentioned areas. Medicinal and fruit plant saplings were planted as well as distributed to the staff/students annually.

c) Human values and professional ethics

Apart from the university prescribed syllabus for Human values and professional ethics, the institution has conducted seminars and guest lectures on the following :

1. Inculcating Ethics and Human Values into the young minds.

- 2. Human values to guide the Engineering profession.
- 3. How to develop moral responsibility and mould the engineers as best professionals.
- 4. Resolving moral issues and dilemma in the profession.
- 5. Justif the moral judgment concerning the profession.
- 6. How to make the students to behave in an ethical manner in the society.
- 7. Developing human values to promote social and natural integration.
- 8. Creating ethical vision and achieve harmony in life.

File Description	Document
Any Additional Information	View Document
Link for Additional Information	View Document

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

#### **Response:** 43

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

#### Response: 43

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document

#### **1.3.3** Percentage of students undertaking field projects / internships

#### Response: 53.04

1.3.3.1 Number of students undertaking field projects or internships

#### Response: 681

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 1.4 Feedback System

<b>1.4.1 Structured feedback received from 1) Stude</b> 5)Parents for design and review of syllabus-Seme A.Any 4 of the above	
B.Any 3 of the above C. Any 2 of the above	
D. Any 1 of the above	
<b>Response:</b> A.Any 4 of the 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
URL for stakeholder feedback report	View Document

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

A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

- C. Feedback collected and analysed
- **D. Feedback collected**

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Any additional information	View Document
URL for feedback report	View Document

## **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1 Average percentage of students from other States and Countries during the last five years

#### Response: 0.32

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

2016-17	2015-16	2014-15	2013-14	2012-13
0	3	10	5	16

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

#### 2.1.2 Average Enrollment percentage (Average of last five years)

#### Response: 31.4

2.1.2.1 Number of students admitted year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	483	721	540	581

#### 2.1.2.2 Number of sanctioned seats year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1458	1572	1572	1500	1308

File Description	Document
Institutional data in prescribed format	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

#### Response: 17.68

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

2016-17	2015-16	2014-15	2013-14	2012-13
0	162	198	190	207

File Description	Document
Institutional data in prescribed format	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

#### **Response:**

The institution assesses the learning levels of the students through the following examinations:

- 1. Intermediate examination.
- 2. EAMCET rank.
- 3. Diagnostic test condcuted in first two weeks of admission

After three weeks of the classwork commencement, again the students are categorized as follows:

#### **Advanced learners**

Advanced learners in a class are identified based on their levels of participation in the classroom sessions, laboratories, their fundamental knowledge, concept understanding and articulation abilities etc. The Institute promotes independent learning that contributes to their academic and personal growth.

The institution responds to special educational/learning needs of them by the following means:

- They are given additional assignments to further their learning.
- They are made to take lead roles in association activities.
- They are encouraged to give seminars in the classrooms and as part of departmental association activities.

- In addition, they are encouraged to offer peer tutoring of weak students, write technical papers on advanced technologies and attend seminars/workshops/symposiums organised by other institutions.
- Further, they are involved in the discussions of R & D Cell to encourage them towards research.
- Permission to make maximum use of library and laboratories developing their problem solving abilities by providing them challenging tasks and exercises.
- Higher education cell motivates such students to prepare for competitive exams such as GATE, CAT, GRE, TOEFL and UPSC.
- Students are encouraged to enrol in professional bodies like IEEE, IETE, CSI and SAE in order to expose their skills in various events.
- Awards / merit certificates are given to such advanced learners for their performance in examinations/ particilation in technical/ cultural/ sports compititions outside the college .

#### **Slow learners**

The institute monitors attendance and results of all the students regularly. Whoever gets less than 50% of marks in mid-term exams are considered as slow learners. College organizes special programs for the slow learners. Appropriate counseling with additional teaching, eventually helps to attend classes regularly. The Following measures are taken to encourage them:

 $\cdot\,$  One faculty has been assigned as a counsellor for every 20 students.

 $\cdot$  The counsellor assesses the specific needs of these students and accordingly offers necessary personal assistance and encourages them to perform better.

· Remedial classes are arranged for slow learners.

 $\cdot$  Poor academic performance due to frequent absenteeism is communicated to the parents by phone as well as registered letters.

 $\cdot$  Applications from the economically weak students are invited to avail financial support to pay their examination fees

 $\cdot$  The previous academic performance and financial status of the students is collected by the college through admission committees.

 $\cdot$  The heads of various departments collect a regular feedback on the attendance and performance of the students which is discussed in departmental meetings

 $\cdot\,$  Attendance record of the students is rigorously maintained

 $\cdot$  The results are analysed to identify weak learners through result analysis mechanism and with the above measures 12 % students became average learners in 3yrs.

File Description	Document
Link for Additional Information	View Document

2.2.2 Student - Full time teacher ratio		
Response: 3.2		
File Description	Document	
Institutional data in prescribed format	View Document	

2.2.3 Percentage of differently abled students (Divyangjan) on rolls		
Response: 0.16		
2.2.3.1 Number of differently abled students on rolls		
Response: 2		
File Description	Document	
List of students(differently abled)	View Document	
Institutional data in prescribed format	View Document	
Any other document submitted by the Institution to a Government agency giving this information	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

#### **Response:**

The institution adopts Experiential Teaching-Learning methods, participative Teaching-Learning methods and Problem solving methods that integrate with each other to yield the best of learning experience.

By bringing real-life context and technology to the curriculum through experiential Teaching-Learning Process through internships and major projects, students are encouraged to become independent workers, critical thinkers, and lifelong learners.

#### Internships

Internship is a great way to explore career fields, learn new skills, and gain hands-on experience in the Real time environment and create a network of contacts. We emphasize on internships aiming our budding engineers to develop their professional and practical skills. Hence, we have included internship as part of

the curriculum for the pre-final year students. All B.Tech students are required to undergo continous training for a minimum of four weeks.

#### **Major Projects**

The main objective of the Project Work is for the students to learn and experience all the major phases and processes involved in solving "real life engineering problems". The major project work to be done in the final year reflects the knowledge acquired by the students during the course of their four-year study. The project work draws upon the theoretical knowledge and experimental skills of the student. Domain knowledge test and platform knowledge test are conducted to assess the student strength.

Student seminars, group discussions, form the participative learning methodologies:

#### **Student Seminars**

Student seminar is a tool to learn and experience conceptual clarity in the subject. Seminar presentations will help the students develop an attitude of critical thinking and go beyond the textbook to understand a given topic. They also provide valuable opportunities for students to develop teamwork, improve communication skills, gain experience of interview skills and get rid of stage fear. It involves group of 3 students. It is focused on students reflection and reasoning to construct their own learning.

#### **Guest Lectures**

In addition to the curriculum designed, students need to be exposed to the latest developments in the field. In view of this, the college invites experts from the industry and centres of higher learning to deliver lectures on topics of current interest. Students are encouraged to ask and get their doubts clarified.

#### Group discussions

Group discussion among students over the technology makes them immense involved in the subject. Subject wise group discussion sessions are conducted.

#### **Case Studies**

Students are encouraged to take up case studies based on topics that demonstrate theoretical concepts in an applied setting. It allows the application of theoretical concepts to be demonstrated, thus bridging the gap between theory and practice.also, this Provides an opportunity for the development of key skills such as communication, group working and problem solving.

#### **3.** Problem solving methods

Students engage in complex, challenging problems and collaboratively work toward their resolution. The problem solving model may be summarized as

- 1) Recognizing a need
- 2) Defining the problem, the objectives and the constraints

3) Collecting information and data

4) Generating alternative solutions

5) Evaluating the consequence of different solutions

6) Deciding and specifying the final 'best' solution.

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

**Response:** 70.32

2.3.2.1 Number of teachers using ICT	
Response: 282	
File Description	Document
List of teachers (using ICT for teaching)	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues		
Response: 4.59		
2.3.3.1 Number of mentors		
Response: 280		
File Description	Document	
Year wise list of number of students, full time teachers and students to mentor ratio	View Document	

#### 2.3.4 Innovation and creativity in teaching-learning

#### **Response:**

The faculty members of the college aim to deliver their lectures in an effective manner to enrich the knowledge of the students' community. They continuously do research to evolve innovative teaching methodologies. Some of the innovative teaching – learning methodologies adopted are:

- Many of the faculty use audio and video visual aids for lecture sessions. This will enable the students to understand the difficult concepts easily.
- The teachers circulate tutorial problems and assignments to the students to improve their creativity

and innovation.

- Formation of different groups among the students and encouraging peer learning, which help the students to improve their creativity and innovation.
- The students are given many tasks such as group assignment completion, problem solving and mini projects. These activities help the students to learn on their know about the developments which are occurred in their field of study. It also inculcate the students self-confidence, creativity lifelong learning.
- Faculty members are also given freedom to plan their period of lecture with question answer sessions, short tutorials, quizzes, presentation by the students to enable their innovation and creativity of the their teaching learning process.
- Students are motivated to convert their innovative technical ideas into useful projects by providing all assistance including mentoring to enhance their hands on experience.
- Students are motivated to do internships, mini projects and in-plant trainings in the industry to convert their innovative and creative idea into products.
- Technical Symposium, project contest like UDHBAV in the campus are the platform for students to showcase their inherent innovative and creative talent and ideas applied on theoretical concepts.
- Students are encouraged to attend the inter college co-curricular activities such as paper presentation, project exhibition, hackathon, poster presentation, conference to enable their innovation and creation.
- The institution motivates students to carry out live projects as major projects to sharpen the critical thinking and innovation among students.
- Addition to above initiatives, the institution also conducting value added courses, workshops and hands-on training activities to enhance innovation and creativity of the students.
- The institution always steps ahead in encouraging the students in inculcation of new technology and innovations as per the market demands

File Description	Document
Any additional information	View Document

#### 2.4 Teacher Profile and Quality

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

#### Response: 100

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

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

#### Response: 8.64

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

2016-17	2015-16	2014-15	2013-14	2012-13
4	25	38	42	20

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 per full time teacher in number of years		
Response: 32.76		
File Description	Document	
List of Teachers including their PAN, designation,dept and experience details	View Document	

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

#### **Response:** 0.29

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

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

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

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

#### Response: 16.71

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

2016-17	2015-16	2014-15	2013-14	2012-13	
35	156	104	20	13	
File Description	on		Document		
List of full time teachers from other state and state from which qualifying degree was obtained			View Document		

#### **2.5 Evaluation Process and Reforms**

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

**Response:** 

Reforms in Continuous Internal Evaluation (CIE) System at the Institutional Level

Centralized Continuous Internal Evaluation System:

Assessment of performance is an integral part of teaching and learning process. As a part of sound educational strategy, the institution adopts Centralized Continuous Internal Evaluation (CIE) System to assess all aspects of a student's development on a continuous basis throughout the year.

· Orientation on Evaluation Process:

Students are made aware of the evaluation process through the following initiatives:-

· The orientation programmes at the beginning of the semester through public address system of the college

· Teaching Plan contains evaluation procedures

· Academic Calendar with Mid term Exam dates

· Orientation on changes and amendments in the evaluation process through Tutorial Meetings

• Display in the College and Department Notice Board

• Result Analysis & Review Meeting: Result Analysis is done by the class tutors after everyMid term examination . Pass percentage of each course is calculated by dividing the total number of students appeared and passed in each course. The performance of the students is monitored by the Principal and the necessary feedback is given to the concerned faculty members. The Principal conducts Review Meetings department wise to give necessary feedback for the improvement of students' performance.

 $\cdot$  Progress Reports & Parents Meetings: The institution is keen on monitoring the performance of the students and reports to the Parents. Progress Reports are sent by the tutors to the parents after each of the test. Parents/ Guardians are advised to note the performance of their wards and take remedial measure if needed. Whenever necessary, the tutor shall recommend the visit of the parent to the college for a discussion about the student.

• Remedial Classes are conducted for the slow learners, absentees and the students who participate in Sports, NSS activities and Placement Interviews. This practice helps struggling learners to update their subject knowledge and helps them to catch up with their peers.

• Reappearing/Recounting/Revaluation: The students are informed of the Reappearing/Recounting/Revaluation scheme available to them. This is permitted for U.G. students who apply for it within the stipulated time on payment of prescribed fee.

File Description	Document
Link for Additional Information	View Document

#### 2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

#### **Response:**

Internal assessment in the college is quite transparent and every student has an idea about the standard internal evaluation process of the theory & practical subjects. The institute follows the university regulations. Evuated answer scripts are given to the studnets to maintain transparency in evaluation. Marks for the examinations (theory and practical) will be displayed in the department notice boards within a week time of the conduct of the examination. Marks obtained in all examinations are noted down in ledger. Parent-teacher meeting conducted every semester to acknowledge the parent regarding their ward's improvement in examinations.

File Description	Document	
Link for Additional Information	View Document	

# 2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

### **Response:**

College has created a mechanism for redressal of student's grievances related to academic and nonacademic matters, such as assessment, victimization, attendance, charging of fees, conducting of examinations, harassment by colleague students or teachers etc. There is an examination Grievance Redressal Committee in the college to deal with the grievances of the students. Mid examinations are conducted according to the academic calendar provided by the JNTUH. Institution prepares an examination timetable according to the academic calendar provided by JNTUH and examination department showcases it much prior to the commencement of classes. Pattern of examination is given by faculty members in their respective classes. To increase transparency about marks in student community, marks are noted down in a ledger and students are allowed to see their marks. The mark sheet is also displayed on notice board.

The examination Grievance Redressal Committee looks after the examination related grevience issues raised by the students. The following is the composition of the same:

Principal – chairman

Incharge examination section – vice chairman

3 senior faculty – members

This committee will deal with all the Grievances directly which are related to the common problems at Institute level both academic.

Procedure for addressing grevience:

A grevience application has be submitte dto the chairman marking a copy to the vice chairman. The Chairperson, after verifying the facts, will try to redress the grievance within a reasonable time, preferably within a week of the receipt of application of the student. If the student is not satisfied with the verdict or solution of the Programme Chairperson, then the same should be placed before the committee. If the student is not satisfied with the decision of committee, he/she can submit an appeal to the Institutional Chairman within a week from the date of the receipt of the reply from the committee, addressing to the Director and copy to Deputy Chairman. The Head of Institute, after verifying the facts after discussion with the Chairman of the committee, shall either endorse the decision of the committee or shall pass appropriate

order in the best possible manner within a reasonable time, preferably within 10 days of receipt of application. While dealing with the complaint, the Committee at all levels shall observe law of natural justice and hear the complainant and concerned people. The institute tries to satisfy the needs of both student and the college.

File Description	Document	
Link for Additional Information	View Document	

#### 2.5.4 The institution adheres to the academic calendar for the conduct of CIE

### **Response:**

The institution adheres to the academic calendar prepared before the commencement of the semester. A committee for monitoring academic calendar is comprised by the institution consisting of Principal, Incharge examination cell and all the heads of the departments. The calendar outlines the semester class work schedule, internal examination schedule and external examination schedule. The faculty members of the concerned department gather the lists of courses for the coming semester. The head of the department finalizes the course allocation for the faculty members based on their choice and area of interest or expertise. The faculty members before the commencement of semester prepares the lesson plan, indicating the topics to be covered lecture wise including the evaluation process for each subject and it is duly reviewed by the one of the senior faculty in the department and approved by the head of the department. It is then, made available to the students. Timetable in-charge of each department prepares the timetable as per the guidelines of respective statutory bodies for the number of credit hours for each subject prior to the commencement of the semester. Time-table is uploaded on the system and displayed in the respective department notice boards. The continous internal evaluation is based on the calender. In addition to the internal assessment, assignments, tests, assignments, mini-projects and quiz are also the part of Continuous Internal Evaluation. The evaluated answer books are returned to the students and an opportunity is given to the students to discuss the evaluation with the teacher. The teacher rectifies any error on the spot, if any.

File Description	Document
Link for Additional Information	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

**Response:** 

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 to meet the following:

1.to develop a positive self-image by knowing that you have what it takes to be a success.

2. To become goal oriented.

3. To take action.

4. To build relationships.

The Program Educational Objectives of the department are published at the following:

Organizational procedure manual

Student admission brochure

College brochure

College website

Lab manuals

Student academic manuals

Head of the Department - room

Department notice board

Laboratories

Faculty rooms

Department Seminar hall

#### **DISSEMINATION:**

The following are the reasons for disseminating the Program Educational Objectives of the department:

- To improve the knowledge base of the stakeholders.
- To educate, explain or promote the Program Educational Objectives
- To cause some feedback that might require further assessment to be done.

The following are the dissemination methods used for the Program Educational Objectives of the department:

Stakeholder	Mode of dissemination	
First year entrants	Orientation/ induction program	
		1

Students	<ul><li>Awareness sessions</li><li>Event Invocation</li></ul>
Staff	<ul><li>Induction program for newly recruited staff</li><li>Event Invocation</li></ul>
Affiliating bodies/other institutions	Official documentations
Society	Community service Event Invocation

- All the first year entrants during their orientation are explained the importance of Program Educational Objective statements.
- The Department also communicates the Program Educational Objectives through courses like freshman's experience and senior experience.
- Students also experience the vision during internships and community service programs.
- This is also emphasized during faculty workshops and meetings, preparing audio visual shows outlining and explaining the Program Educational Objectives

Real Implementation of a vision is in the execution of the strategic plan throughout the organization, in the continual monitoring of progress

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

### **Response:**

The program outcomes are assessed with the help of course outcomes of the relevant courses through direct and indirect methods.

Attainment of Program Outcomes and Program Specific Outcomes: A. List of assessment tools & processes:

i) Direct assessment: The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the POs and PSOs through the mapping of questions to COs and COs to POs and PSOs. CO-PO & PSO mapping for all the courses in the program is prepared by the program coordinator.

ii) Indirect assessment: The feedback is collected through an on-line survey from the students at the end of program(Program Exit Survey).In Addition to this, student portfolios (Co-curricular, Extra Curricular,

Placement, Higher studies, etc.)for the final attainment of POs & PSOs. B. The quality/relevance of assessment tools/processes used: The attainment of the PO & PSO is computed as a weighted average of attainment of the COs that are mapped to the given PO&PSO. The overall PO & PSO attainments are calculated by considering 70% of direct attainment and 30% of indirect attainment through surveys. Out of 30% of indirect attainment, 10% weightage is given for program exit survey, 10% for employer survey and 10% for student portfolio.

Indirect assessment strategies are implemented by embedding them in Student Exit Survey, Employer Survey and Alumni Survey. The following are the details:

1. End Semester University Examination, at the end of each semester university conducts examinations based on the results published by university the course outcomes are measured based on the course attainment level fixed by the program.

2. Assignments are given at the end of each module. They are provided to students, so that they refer the Direct End of each module text books and good reference books to find out the answers and understand the expected objective of the given problem. The questions asked in assignments are mostly aligned with Course Outcome of the respective subject According to the performance of the student in answering each question, mapping is carried out with the respective COs for assessing the attainment level of the specific CO of the subject.

3. Two internal examinations are conducted per semester for the following purposes:

To ensure that students have achieved desired level of competencies at module level. To evaluate, whether corresponding COs are achieved or not.

4. Alumni survey is used to assess the Level of relevance of the curriculum with the expected skills of the industries. In the survey, specific questions are prepared by keeping in the view to support the assessment of level of attainment of POs.

5. Employer survey is conducted for finding out whether the knowledge, skill and attitude learned from this institution is adequately satisfying their expectation or not. Every year end the questionnaire is sent to the employers who have recruited our students.

6. Student exit survey is conducted to identify factors for future strategy framing and understand the impact of training they got.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### 2.6.3 Average pass percentage of Students

**Response:** 61.13

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 195

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

Response: 319

File Description	Document
Institutional data in prescribed format	View Document

### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process	
Response: 3.66	
File Description	Document
Database of all currently enrolled students	View Document

### **Criterion 3 - Research, Innovations and Extension**

### **3.1 Resource Mobilization for Research**

**3.1.1** Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

### **Response:** 305.45

3.1.1.1 Total Grants for research projects sponsored by the 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)

2016-17	2015-16	2014-15	2013-14	2012-13
62	71.3	67.65	64.7	39.8

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

### 3.1.2 Percentage of teachers recognised as research guides at present

#### Response: 0.75

3.1.2.1 Number of teachers recognised as research guides

Response: 3

File Description	Document
Institutional data in prescribed format	View Document

**3.1.3** Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 1.69

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 131

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

### **3.2 Innovation Ecosystem**

# **3.2.1** Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

### **Response:**

The interaction with various academic Institutions, research establishments and industry on academic research, sponsored research and/or consultancy helps in identifying relevant new technologies and widening the knowledge base. Such interaction becomes an integral part of the innovation process where both the academic Institution and the innovators are benefited. At the Institutional level, it helps in infrastructure development through resource generation and at the professional level, faculty establish contacts through participation in conferences, workshops, seminars and meetings of professional bodies.

ASTRA is committed to knowledge transfer and engage in technology transfer and economic development activities that benefit the society. The researchers address many of the major challenges that face the society from energy sector including non-conventional energy sources, nuclear energy

The R& D policy was framed by considering following factors:

- 1. Incubation centre
- 2. Faculty quality/qualification improvement

As a part of the career development, faculty members have opportunities to register for Ph.D. degrees. A large number of faculty members in various departments are pursuing Ph.D. programmes as part of career advancement.

3. Publication

Number of publications in reputed journals, which is a good indicator of research output has been quite satisfying during the last three years. For attending conferences to present papers, registration fees and travel will be supported by the college as per Policy

4. Sponsored/ Funded research from external agencies

The faculty members are encouraged to apply for grants from various funding agencies such as DRDO, DST, ISRO, DBT etc.,

5. Consultancy

Consultancy work can be taken up by faculty to solve problems referred by industries and government agencies, wherein the professional expertise and knowledge of the faculty members as well as the infrastructural facilities of the college will be utilized

File Description	Document
Link for Additional Information	View Document

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

Response: 12

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

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

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

### **3.3 Research Publications and Awards**

#### 3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes	
File Description	Document
Institutional data in prescribed format	View Document

# **3.3.2** The institution provides incentives to teachers who receive state, national and international recognition/awards

**Response:** Yes

File Description	Document
List of Awardees and Award details	View Document
e- copies of the letters of awards	View Document

### **3.3.3** Number of Ph.D.s awarded per teacher during the last five years

#### **Response:** 3.5

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 7

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	<u>View Document</u>

# **3.3.4** Number of research papers per teacher in the Journals notified on UGC website during the last five years

#### **Response:** 0.97

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13	
117	44	73	42	60	

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

# **3.3.5** Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

#### Response: 0.3

3.3.5.1 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

2016-17	2015-16	2014-15	2013-14	2012-13	
6	80	5	8	3	

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

### **3.4 Extension Activities**

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

### **Response:**

The College motivates the students to participate in the extension activities to develop their mental and physical strength, leadership qualities, social responsibilities and organizing capabilities

- Tobacco awareness rally
- Voting awareness rally
- Helmet awareness rally
- Health camp, blood donation camp and NSS activities
- Cultural activities
- Women's day celebration

Extension activities conducted to impact and sensitizing students to social issues and holistic development

1. In the holy month of Ramzan, Muslimfaculty members, staff members and students are participating in full day fasts. This fasting is done during the daylight hours from dawn to sunset. In order to break the fast, the students of Civil engineering thirdyear organized "Iftar Party" for their staff members and students on 26th July 2014.

2.Bathukamma is celebrated in the college every year.Bathukamma is a Telangana festival that is celebrated during the Navaratri's of Dusheera. It is goddess Gowri/Gouri that is celebrated in the form of Bathukamma.

3. College celebrated Ayudha Puja every year. It is an integral part of the <u>Navratri</u> festival aHindu festival which is traditionally celebrated in India. It is also called "Astra Puja".

4. College celebratedSankranti. It is known to be the important festival celebrated all over India on the name of sun god, the symbol of divinity and wisdom. Which has four days celebration such as Bhogi, Sankranthi, Kanuma and Mukkanuma

5. Martyrs' Day is an annual day is celebrated in the college. It is observed by nations to salute the martyrdom of soldiers who lost their lives defending the sovereignty of the nation. January 30this the date observed at the national level. The date was chosen as it marks the assassination of Mohandas Karamchand

Gandhi in 1948.

6. The National Unity Day was celebrated to Commemorate SardarVallabhbhai Patel's 139th birth anniversary in our campus.

7. Collegecelebrated National women's Day every year.

8. Voter's awareness program is conducted on 28.01.2016

9. Swacha Bharat Abhiyanis conducted every year by the students.

10. Radio Mirchi 93.5 FM conducted Mr and MsFreshers of Hyderabad at this Academy in 2013

11. Gemini TV conducted Telugu Ammai contest at this Academy.it is about the traditions of different states.

12. Vanitha TV conducted an awareness program for youth about social the social responsibilities on 12th Feb 2014

13. College has conducted the international mother language day to create awareness about the importance of mother tongue.

14. Nature club conducted the planation programme to create the awareness about the green campus.

15. College conducted No smoking day to create the awareness about cancer

16. Blood donation camp is conducted to create awareness about the blood donation

17. The world health day is conducted to create the importance of the health.

# **3.4.2** Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

### **Response:** 5

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

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

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

### 3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

### **Response:** 16

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
6	5	2	2	1

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

# 3.4.4 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

Response: 53.89

3.4.4.1 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. yearwise during the last five years

515 1315 1556 900 1000	

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

### **3.5** Collaboration

# **3.5.1** Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

### Response: 359

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

2016-17	2015-16	2014-15	2013-14	2012-13
139	94	73	40	13

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

**3.5.2** Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

### **Response:** 13

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2016-17	2015-16	2014-15	2013-14	2012-13
5	3	2	2	1

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

### **Criterion 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.

### **Response:**

Our college encompasses a well maintained campus spread over 25 acres of land being the largest campus in the Hyderabad corporation limits. The following are the details of the infrastructural facilities available for teaching – learning:

The college has adequate number of class rooms and laboratories as per norms to cater the needs of any academic activity. Further, every Department is equipped with their own computing resources as well as departmental library. The Departments have their own specialized software in their laboratories. In addition, the college has a Central Library that is equipped with different National and International journals. Digital Library is an additional advantage for the college. The high-end library server is an added advantage for the faculty and students in terms of storage of learning material and accessibility. The following are the details of the same.

**Classrooms:** Our institution has sufficient number of well-furnished, well ventilated, spacious classrooms for conducting theory classes. Each classroom is equipped with LCD Projector, audio system and internet.

**Laboratories:** All our laboratories are well equipped and well maintained not only for carrying out curriculum oriented lab practicals but also to carry out research activities. All the laboratories are established as per AICTE and JNTUH norms. All department are fully equipped with latest state-of-the-art technology equipment as mentioned in the curriculum. Every department has got their own computing facilities with latest softwares to meet their own requirements of major project/mini projects and research activity. In addition to the regular curriculum, students are encouraged to pursue their study/project work in the emerging areas of Research. The college has established advanced Research laboratory facilities in specific areas to inculcate research habits among the student fraternity.

**Seminar Halls:** The College has five seminar halls to conduct conferences, seminars and workshops for students and faculty members as well. They are equipped with LCD Projectors, white boards, public addressing system with internet connectivity.

**Tutorials:** Each department has tutorial classrooms to conduct tutorial classes to address the queries of the students even personal level doubts too. Tutorials are is equipped with black board, wooden benches, fans, tubelights etc.,

**Language laboratory:**The college has well equipped Language Lab with LCD Projector –Audio-video facilities, computers, chairs and micro phones too.This indeed make students to listen, learn and perform Group Discussions, Debates, JAM and enhance Interview skills.

**ICT as a Learning Resource:** The college has more than 700 computers spread across various departments and centers for the day-to-day usage by the students and faculty. Every department has its own computing facilities to meet the curriculum needs. Laptops are also made available with the departments for faculty

usage. Desktop Computers are also provided in staff rooms and departmental library.

File Description	Document
Link for Additional Information	View Document

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

### **Response:**

### **Sports and Games facilities:**

The college has separate play grounds for games like cricket, football, basket ball, volley ball, Shuttle Badminton, Handball, facilities for field events like Javelin Throw, Shot-put, Hammer Throw, Discus Throw and Jumps etc, Institution has indoor games facility too for table tennis, caroms and chess. A qualified Physical Director with is available along with adequate supporting staff. Good numbers of sports activities are organized in college making the students to display their talent in sports competitions. Annual sports meet is organized by the institution and the best players in all the sports and Games are awarded medals/ shields along with a certificate on the annual day. Our students excel in sports and games and are champions in University, State and National events. The Institution encourages students to participate in state level and inter college tournaments. College provides conveyance to players for participation in sports events, which include suniforms and other requisite materials. Students, who have played Inter University / All India sports, and who have played state level sports, get appreciation certificate from management. College management provides fee concession/ cash prize/certificates/mementos etc. to deserving sports persons to motivate them to achieve excellence in their pursuit of sports.

### Yoga:

The college also has a Yoga room where students and faculty members do meditate and even practice yoga.

**Gymnasium:**Physical activity is good for mental health. Experts believe that exercise releases chemicals in the brain that make us feel good. Regular exercise can also boost the self-esteem and help us to concentrate, sleep, look and feel better. Believing all these, the college has established a well equipped gymnasium with all the modern fitness equipment within the campus for students and staff. Students are us this from 08:30 to 09:00 am and from 4:00 pm onwards.

### **Cultural Activities:**

Students are very much encouraged to participate in the cultural events held in the college like Technical

fests, Freshers, Annual Sports Day, Annual Day, Farewell etc., to exhibit cultural talents. Students are even sent to other colleges for intercollegiate competitions like dances, skits, mimicries etc., the college has clubs/ Committees to enhance the hidden talent of the students. The college has established cultural club comprising of all the budding artists and students who are inclined toward performing and theatre arts. It inculcates the sense of belongingness, Team work , coordination & amiability. Such clubs enhance the Social Skills in students besides their professional education. All boys and girls are equally encouraged to exhibit their hidden talent at various platforms. The club organizes various festivities of National Importance and Tradition according to the college academic calendar.

File Description	Document
Link for Additional Information	View Document

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

#### Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 62

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
Link for additional information which is optional	View Document

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

#### **Response:** 16.37

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

2016-17	2015-16	2014-15	2013-14	2012-13
181	232	156	133	76.64

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

### 4.2 Library as a Learning Resource

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

### **Response:**

The entire library is automated using computer systems. The Digital Library is provided with Tidal data ML – 11220 Server with 4.7 TB storage . The library is a member of DELNET and provides web access to Records of books, Periodicals, Theses, Dissertations. Transactions are automated by using bar code reader. Circulation of books will be done through NEWGENLIB Integrated Library Management Software.

Apart from Books, our library is equipped with various e- learning resources which contain NPTEL videos, NPTEL Web courses, e-Books. **SONET** (Society for Networking in Engineering and Technology) CDs and DVDs are maintained separately for easy access by the students. D- Space Software DIGITAL LIBRARY is also available which contains e-books, E Question Papers, Syllabus, Lab Manuals etc for the benefit of the students and Staff. We have Institutional Membership of **National Digital Library (NDL)** and **DELNET (Developing Library Network)**, New Delhi which is providing online services for E Journals, E Thesis, E databases, etc. Library is Wi-Fi enabled. Qualified and trained staff members in the library help the users in searching for the databases or e-resources.

The following features can be accessed from any computer within the campus:

- 1. availability of books by subject wise / author wise
- 2. account information like books taken and due date to return
- 3. fine amount to be paid for books not returned
- 4. access to the e-resources /NPTEL /SONET video lectures

File Description	Document
Link for Additional Information	View Document

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

### **Response:**

The college has a good collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment. The book details are mentioned herewith:

S.No	Name of the book/ manuscript	Name of the publisher
1	Complete History of the World	Harper Collins
2	Shakespeare : The Complete Works	University of Michigan
3	New Enclyclopaedia of Common Diseases	Rodale Press
4	Britannica Ready Reference Encyclopaedia	Enclyclopaedia Britannica (India
5	Handbook of Chemistry and Physics 80th Ed	CRC Publications
6	On Hinduism	Aleph Book company
7	An Invitation to the White House	Simon and Schuster
8	The Worlds Last Mysteries	Readers Digest
9	Answer Book 10001 Fast Facts about our World	National Geographic
10	Ultimate Family Visual Dictionary	National Geographic
11	Science of Everything	National Geographic
12	Knowledge Encyclopaedia	National Geographic

File Description	Document
Link for Additional Information	View Document

### **4.2.3** Does the institution have the following:

1.e-journals
 2.e-ShodhSindhu
 3.Shodhganga Membership

- 4.e-books
- 5.Databases

A. Any 4 of the above

**B.** Any 3 of the above

### C. Any 2 of the above

### **D.** Any 1 of the above

### **Response:** B. Any 3 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)

### Response: 13.21

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

2016-17	2015-16	2014-15	2013-14	2012-13
16.25	16.72	14.44	9.86	8.8

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

Response: 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

#### Response: 14.66

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

#### Response: 247

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

### **4.3 IT Infrastructure**

### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

### **Response:**

The college adopts best practices for scalable and sustainable implementation of all IT services. It provides computing and networking services such as desktops, laptops, internet for all the departments, library and office. Appropriate standards are followed for selection, purchase, setup and maintenance of all computing and networking equipment is done by the Technical Committee. The College provides necessary training to the users through the Technical Committee.

Procurement of computing and networking equipment are made through a Technical Committee comprising of the Principal, Head of the Electronic Science Dept., IQAC Coordinator, Office Superintendent, Laboratory Assistants and Heads of the various Departments. College strictly adheres to the Terms & conditions of license agreements of IT resources software usage. It insists upon use of licensed (Microsoft Windows and Microsoft Office) or open source software and strictly prohibits the usage of pirated and unlicensed software. Licenses of all software are maintained by the Technical Team and Office Superintendent. Antivirus Internet connected computers for the students & teachers and computer terminals where the pen drives are required to be connected, have been installed with the Antivirus software.

Consecutive up gradation arrangements are incorporated in the yearly budget plan. Amount spent for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution during last five years are as follows:

Year	Amount Spent	
2013-14	Rs 21,67,000	
2014-15	Rs 16, 45,000	
2014-15	Rs 6, 39,500	
2015-16	Rs 6,48,900	
2016-17	Rs 7,32,700	

The college encourages use of ICT resources for computer-aided teaching/ learning for staff and students. Details of computerized hardware and software available in the college as ICT resources:

Hardware: There are 6 centralized servers. All computers are in LAN 10/100/1000 Mbps Internet connectivity from leased line In Library 20 node are marked for exclusive for Digital Library & Internet Usage.

### LICENSED SOFTWARES:

### MICROSOFT CAMPUS AGREEMENT

MS-WINDOWS 2008 SERVER

REDHAT LINUX 7.0

SCO UNIX 5 .0.6

ORACLE 8I

MY SQL

VISUAL STUDIO 6.0 VER

JAVA DEVELOPMENT KIT

TURBO C++ 4.5 & 3.0

ADOBE COLLECTIONS

UML -RATIONAL ROSE

K7 ANTIVIRUS PACK.

AUTO CAD DESIGN SUITE

ML MATLAB 8.2

ANSYS

MY SQL, TOMCAT SERVER, JAVA, JDK7, ETC .

### ICT resource Updation done in the past five years are as follows:

S.No	Item	2012-13	2013-14	2014-15	2015-16	20	6-17
1	Computers	570	650	780	780	780	
2	Laptops	5	8	35	55	68	
3	Server	2	2	2	2	2	
4	Networking switches	20	20	20	22	28	
5	Wifi	28Mbps	28Mbps	48Mbps	100Mbps	200	Mbps
6	Anti virus software	8	8	8	8	20	
7	System software	windows,Ubun	windows,Ubun	windows,U	windows 7,ubuntu	wii	ndows

		tu,linux fedora	tu,linux fedora	buntu,linux fedora		
8	Application software	MS- office,open office	MS- office,open office	MS- office,open office	MS-office,Apache open office,LATEX, Library office,JDK1.8,oracle 10g,Apache Tomcat 5,php,weka,eclipse luna	MS-offic open off X,Librar DK1.8,o 10g,Apac Tomcat 5,php,we luna
9	Scanners	2	2	5	8	8
10	Printers	19	23	29	33	41
11	LCD projectors	5	20	31	54	62
12	Hard disks	8	11	15	15	19
13	Pendrives	0	5	9	18	35
14	CD Roms	2	2	4	4	5
15	Digital recorders	0	0	1	2	2
16	Digital cameras	0	0	39	72	85
17	Suvvelience system	0	0	1	1	3
File De	escription		Document			
	ink for Additional Information			View Document		

### Response: 1.81

File Description	Document
Student - Computer ratio	View Document

# 4.3.3 Available bandwidth of internet connection in the Institution (Lease line) >=50 MBPS

#### 35-50 MBPS

### 20-35 MBPS

### **5-20 MBPS**

#### **Response:** >=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)

Response: No	
File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	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

Response: 1.18

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)

2016-17	2015-16	2014-15	2013-14	2012-13
9.58	10.68	11.93	10.63	11.02

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

### **Response:**

The college has established systems and procedures for the maintaining and utilizing physical, academic and support facilities - laboratory, library, sports, computers, classrooms etc. The college maintenance cell is formed since the day of inception to follow up and maintain the following:

1. Cleaning of the classrooms, laboratories, library, seminar halls, tutorials, staff rooms, corridors, staircases, common areas is taken up twice a day by the college sub staff (aayammas).

2. Toilets and rest rooms being outsourced to housekeeping agency for twice a day cleaning

3. Water coolers are cleaned daily once.

- 4. Water tanker is cleaned weekly once.
- 5. Laboratory equipment:

Lab assistants Maintain the respective laboratory equipment by closely monitoring the working conditions and in case required they even take up minor servicings also. In case of major repair or shut down of the equipment, the concerned vendor is called for servicing. Stock verification is done once in a semester.

6. Library books:

The library support staff maintain the library books, journals, periodicals, back volumnes, project reports, magazines, Vedio CDs, news papers. They take up the book binding works and stock verification is done once in a semester.

7. Sports & games:

The physical director along with his support staff maintain the sports and Games facilities. The Indoor sports room and Gym is daily cleaned and the material is regularly services whereever appliable. Stock verification is done once in a semester.

6. The supervisor and care taker monitor these staff for their works allotted.

7. Civil (Every month 5th), electrical (Every month 15th) and furniture routine check-ups (Every month 25th) and repairs are taken up at a prescribed frequency as per the college policy.

8. Staff in college maintenance cell -01 superintendent

02 supervisor

01 Care Taker

03 Electricians

02 carpenters	
01 plumber	
12 attenders	
40 Aayammas	
The following departments takes care of maintenance of the infrastructure of the college	

S.No.	Departments	Area		
1	Civil Maintenance	Mainten	ance of all academic facilities like Class rooms, lab	orato
		building	s and Campus development or Vertical, Horizontal exp	osure
2	Electrical Maintenance	Mainten	ance of all electrical work in the entire campus incl	uding
		UPS, Sta	abilizers, Geberator, Transformer and all electrical fixtu	ures.
3	Furniture maintenance		e of new furniture and maintenance/ repair of fu	
		classroo	ms, laboratories, library, staff rooms, office, support sy	stems.
4	AC Maintenance		e off AC, Water cooler, defreeze and maintenance of e	
5		-	ance all water lines, bore well pipeline , RO water	plant
	maintenance	-	t plumbing work in the campus.	
6	Horticulture	-	ardens, lawns, plants and trees in the campus are r	nainte
		-	ed for more green area	
7	7 General maintenance (HouseClean the entire campus, class rooms, laboratories and toilets			
	Keeping)			
8	Computer and IT Maintenance		puters, Servers, networking, ICT marerial, Wifi, T	
			nachines, LCD projectors, CC cameras and access	sories
		maintain		
9	Library Maintenance		ance of books, magazines, journals, online resou	irces
		purchase	e of books, journals, magazines and on-line resources.	
File Deso	cription		Document	
Link for	Additional Information	2	View Document	

### **Criterion 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

### Response: 61.53

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

2016-17	2015-16	2014-15	2013-14	2012-13
840	1238	1275	1312	1205

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

Response: 10.06

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

2016-17	2015-16	2014-15	2013-14	2012-13
299	281	249	13	12

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

5.1.3 Number of capability enhancement and deve	elopment schemes –
1. 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	
A. 7 or more of the above	
B. Any 6 of the above	
C. Any 5 of the above	
D. Any 4 of the above	
<b>Response:</b> A. 7 or more of the above	
File Description	Document
Details of capability enhancement and development schemes	View Document
Link to Institutional website	View Document

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

Response: 10.23

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

2016-17	2015-16	2014-15	2013-14	2012-13
120	250	250	250	120

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

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

### Response: 9.95

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

2016-17	2015-16	2014-15	2013-14	2012-13
125	175	225	225	210

File Description	Document
Details of the students benifitted by VET	View Document

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

**Response:** Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View Document</u>
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

#### Response: 57.26

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

2016-17	2015-16	2014-15	2013-14	2012-13
146	249	293	301	214

File Description	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)

### Response: 29.74

5.2.2.1 Number of outgoing students progressing to higher education

Response: 58

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/ TOEFL/ Civil Services/State government examinations)

#### Response: 67.85

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

2016-17	2015-16	2014-15	2013-14	2012-13
91	147	177	145	97

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
172	210	269	287	97

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	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.

### Response: 18

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

2016-17	2015-16	2014-15	2013-14	2012-13
3	9	6	0	0

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

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

**Response:** 

### STUDENT COUNCIL

The college has an active student council to look into the students matters, keep all the studnets active in various aspects of learning.

### **OBJECTIVE:**

To make all the students of the academy actively participate in the development of the institute and build their career, personality and organizational skills through interactive programs with the college and society.

### **COMPOSITION:**

Chairman	- Director
Mentor	- One senior faculty
President (1)	- To be elected by the college staff
Vice President (1)	- To be elected by the college staff
Department representative	- One student per department
Class Representative	- One student per class

### **Functions :**

- To prevent ragging in the campus.
- To help the college administration in smooth conduct of technical, cultural and extracurricular activities on the campus.
- To encourage innovative and creative skills of the students.
- To organize programs in the campus to improve the cleanliness and greenery.
- To maintain peace and harmony in the campus in General and student community in particular.
- To ensure that each and every student adheres to the college code of conduct.
- To represent the college at platforms of academic importance.
- To call for applications from Poor students for financial aid and recommend to the Head of the Institution.
- To identify student talent in sports, cultural, fine arts etc and report in the committee meeting so as to encourage accordingly.
- To coordinate with the student community and college authorities in matters of smooth academic administration.

### **Meeting Frequency :**

5th of every month, In case of holiday, immediate working day.

### **SELECTION OF STUDENTS :**

- During second week of second semester of every academic year, student representatives for various levels of hierarchy will be elected.
- Students of each class would be grouped into clusters of 10 each and a group Representative would be elected by them.
- All the group representatives of a class elect a Class Representative.
- Only 3rd year students are eligible to be Department Representatives.
- All the class representatives of a department elect the Department Representatives.
- Department Representatives are eligible to contest for the post of Student Vice President and President.
- All the Teaching Faculty, Non Teaching and Administrative Staff of the college elect the Student Vice President and President.

File Description     Document	
Any additional information	View 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

### Response: 28

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

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

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

### **Response:**

The main objective of the Aurora's alumni association is to register all the alumni facilitating active participation. The following are the various

**Mentorship:** The Alumni services are taken in terms of mentoring the final year B.Tech students so that they get an awareness of the practical aspects of life. The Alumni have been succesfull in giving guidance to some of the aspirants in their area of expertise.

**Placements**: In certain case, the alumni services have been taken by the college placement cell for arranging campus placements that give a special oppertunity for our final year students to attend the campus placement drives. Thus some of the Alumni were succesful in helping the final year students secrure Job opportunities in their companies.

Career Guidance: Some of the alumni were active in coming forward and deliver lectures amd awareness

seminars on career guidance to our fourth year students.

Financial Contribution: Each alumni of the college volunterily contribute Rs 500/- (Maximum). this fund is exclusively utilized for the alumni related meetings and teh accounts of the same are thoroughly operated by the alumni association under the supervison of the faculty coordinator.

5.4.2 Alumni contribution during the last five ? 5 Lakhs	years(INR in Lakhs)
4 Lakhs - 5 Lakhs	
3 Lakhs - 4 Lakhs	
1 Lakh - 3 Lakhs	
<b>Response:</b> ? 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

**Response:** 5

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

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

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

#### **Criterion 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

#### **Response:**

#### Vision

Aurora envisions 'to make itself synonymous with learning'. We aim to equip our students with a perfect combination of profound knowledge with humane values.

#### Mission

- The academy is devoted to academic distinction, research, scholarship and service.
- The Academy's hallmark is a cultural engagement that bridges theory with practice extends the learning process beyond the classroom and promotes students' growth and culture.
- The mission of teaching faculty is dedication to excellence in teaching and the development of a fertile environment exemplified by a free exchange of ideas, high academic expectations and individual responsibility for academics success and achievement.

#### **Effective Leadership**

Leadership of the Governing Council of our institution is keen on imparting the higher education to economically and socially backward classes of the society and is bound to uplift the downtrodden in the Society since its inception in 2001. The institution has witnessed the change and gauged the need of the society and industry today and hence revised the Vision & Mission statements of the College by taking into consideration the suggestions by the stakeholders. Nature of Governance is 100% participative and the decision making is immediate.

Our governance body is reflective and the prime focus is always on the vision and mission of the institute. The following strategic characteristics and aspirations enable the College to realize its vision:

 $\cdot$  Modern and precise educational experiences that develope the engineers

 $\cdot$  An atmosphere that facilitates personal commitment to the educational success of students in an environment that values multiplicity and society

 $\cdot$  Education and research partnerships with Universities, colleges and industries

· Highly successful alumni who contribute to the profession in the global society

·Undergraduate and Post graduate programs that integrate global awareness, communication skills and team building across the curriculum

· Practical and responsible resource management

· Training that prepares students for interdisciplinary engineering research and advanced problem solving

 $\cdot$  Leadership and service to meet society needs.

Our teaching faculty is involved actively in College Development Committee and various other internal committees which are the major decision making bodies. Principal of the College is also a member of Governing Council through which various policy making decisions are taken for the College development & other College activities. As per the Perspective plan of the College, the various decisions focusing on the Vision-Mission statement are taken through these meetings.

Top management with the help of the department wise committees formulates quality policy and integrates the same in the strategic plan. Formulation of action plans and defining the policy objectives attempts to address the issues of systematic change to provide quality education. Creating robust principles, frameworks, systems and processes the institution intends to reinforce the culture of excellence. All the systems work together as a team aiming to be champions of organizational change. The Departments fosters a healthy competitive atmosphere among themselves and each one strives to accomplish excellence in their standards

File Description	Document	
Link for Additional Information	View Document	

#### 6.1.2 The institution practices decentralization and participative management

#### **Response:**

College follows the decisions taken in the meetings of the Governing Council/ Academic council/ College Development Committee/ IQAC. In Academic council and college development meetings, major college related decisions are taken and the various sub-committees are formed under the respective Heads to complete the decided task, exhibiting the decentralization & participative management. All such decisions are communicated to the Governing Council time to time.

The Management gives freedom to the Principal to function in order to fulfil the college vision and mission. Academic responsibilities are fairly divided among all the staff members. Committees are appointed for the various academic and co-curricular activities to be conducted in an academic year. The list of committees is displayed at the beginning of the year on the staff notice-board as well as the website. This ensures transparency in policy execution. The responsibilities are communicated to the faculty members. Various co-curricular and extra-curricular activities are conducted through student committees accordingly. The Principal of the College holds regular meetings with the teaching and nonteaching staff. Other units of the college like sports, placements, discipline, arts, library etc. have operational autonomy under the guidance of the various committees/clubs/associations and students are involved from various departments

## A Case study: Decentralization & Participative Management of IT & technical facilities on the College Campus:

**Background/ History:** When the number of Computers & gadgets was less, the required maintenance was within the limit of only computer science department. Eventually the number of Computers increased year by year. With this, the other heads of the departments like Electronics, civil and mechanical engineering requested to have the operational and maintenance control in their own departments. As per the college development committee Resolution, an ICT maintenance committee has been formed for the maintenance & upkeep of the gadgets and computers in May 2014. The ICT maintenance committee gave a proposal to the college development committee in June 2014 to recruit two system administrators that has considered the same and posted to the governing council accordingly. The governing council approved it in Dec 2014 and thus the college could recruit system administrators in Jan 2015.

**Implementation:** The principal has instructed to form an ICT maintenance Committee on 06.05.2014 to purchase, maintain and upgrade the Computers & IT facilities and also give the technical support needed by the College for smooth functioning of the Computers and IT devices.

#### **ICT maintenance Committee composition:**

Chairman-Principal

Head (Head of the Department CSE)

Members --- Administrative officer, Head of all the Departments, system administrators and 03 senior lab technicians of CSE department.

#### **Functions:**

This Committee has been undertaking all the technical support, purchase, maintenance and up gradation of all the softwares, computers, ICT devices, Laptops, Projectors, Networking and Internet service including License Management etc. since its formation in May 2014. This committee has been successfully reviewing the needs of various departments/ cells/ sections and takes accord permission from the college development committee to meet the same.

Summary: This assures the decentralization and participation of all the concerned to solve the issues.

#### **6.2 Strategy Development and Deployment**

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

**Response:** 

Vision

Aurora envisions 'to make itself synonymous with learning'. We aim to equip our students with a perfect combination of profound knowledge with humane values.

#### Mission

- The academy is devoted to academic distinction, research, scholarship and service.
- The Academy's hallmark is a cultural engagement that bridges theory with practice extends the learning process beyond the classroom and promotes students' growth and culture.
- The mission of teaching faculty is dedication to excellence in teaching and the development of a fertile environment exemplified by a free exchange of ideas, high academic expectations and individual responsibility for academics success and achievement.

#### **Perspective Plan for the development of college:**

- To Standardize ICT based teaching-learning processes
- To establishing university recognized R&D centres
- To evolve self-learning modules using modern educational technology
- To more number of Value added certification courses
- To further Strengthen industry-institute interaction
- To Improve consultancy services
- To organize an International Conference every year
- To get Autonomous status
- To get Deemed- to- be- University status

In this way, the strategic plan of the Institution reflects the vision and missions to develop excellence in higher education.

#### Major deployments of the institution:

- Each classroom is equipped with an LCD projector
- Computerization of office, library and examination branch
- Established industry institute interaction cell
- Established Robotics laboratory (beyond the curriculum)
- Established advanced embedded systems laboratory (beyond the curriculum)
- Organized two International conferences
- Organized four National level Technical fests
- Organized four National level sports meets

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

**Response:** 

#### Functions of the Governing Council:

The Governing Council shall be the principal organ of Management and principal executive body of the institution and the following are its functions:

- 1. Fixation of the fees and other charges payable by the students of the college on the recommendations of the Finance Committee.
- 2. Instituting scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic Council.
- 3. Approving institution of new programms of study leading to degrees or diplomas.
- 4. Perform such other functions and institute committees, as may be necessary and deemed fit for the proper development and fulfillment of the objectives for which the college has been declared as autonomous.

Other than the above mentioned functions, the body has the following powers:

1. To establish, on the advice of the Academic Council, Divisions and Departments for the academic work and functions of the institution and to allocate areas of study, teaching and research.

2. To create teaching and academic posts, to determine the number, cadres and qualifications thereof as approved and the emoluments of such posts in consultation with the Finance Committee.

3. To appoint Professors, Associate Professors, Assistant Professors and other academic staff as may be necessary on the recommendation of the Academic Council.

4. To lay down the duties and conditions of service of the Professors, Associate Professors and Assistant Professors and other academic staff of the institution in consultation with the Academic Council.

5. To provide for appointment of Visiting fellows and Visiting Professors

6. To create administrative and other necessary posts in terms of the cadres laid down and to make appointment thereof in consultation with the Finance Committee;

7. To constitute, for the benefit of the teaching, academic, technical, administrative and other staff, such pension, insurance, provident fund and gratuity as it may deem fit and aid in the establishment and support of Association, Institutions, Funds, Trusts and conveyances calculated to benefit the staff and the students of the Institution.

8. To regulate and enforce discipline among the employees of the institution and to take appropriate disciplinary action, wherever necessary.

9. To entertain and adjudicate upon and, if thought fit, to redress any grievances of the employees and

students of the institution.

10. To approve the award of Degrees based on the results of examinations and tests and to confer, grant or award Degrees, Certificates and other academic tittles and distinctions.

11. To fix the emoluments and traveling and other allowances of examiners, moderators, tabulators and such other personnel appointed for examinations in consultation with the Academic Council and the Finance Committee

12. To issue appeals for funds for carrying out the objectives of the institution and, consistent with the provisions of the objectives, to receive grants, donations, contributions, gifts, prizes, scholarship, fees and other moneys, to give grants and donations, to award prizes, scholarships etc.

the details of the Academic council and the various other committees of the college are availabel in the college website

File Description	Document
Any additional information	View Document
Link for Additional Information	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	
A. All 5 of the above	
B. Any 4 of the above	
C. Any 3 of the above	
D. Any 2 of the above	
<b>Response:</b> A. All 5 of the above	

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	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

**Response:** 

**Example:** 

College development committ Meeting – held on 02nd feb 2016

Agenda – To organize International Conference

Resolutions-

- 1. To effectively plan for the conduct of an International conference in Dec 2016
- 2. To form a streeing committee for the execution of the same.
- 3. To Prepare the budget plan
- 4. To submit a detailed proposal for the Governing council latest by 25th feb 2016

Governing council meeting – held on 5th March 2016

Agenda (one of the agenda) – Approval of organizing International Conference in Dec 2016

Resolutions (one of the resolution) - To Organize International Conference in Dec 2016

#### **Implementation:**

After getting the approval from Governing council, the Principal instructed the Head- R&D cell to plan for the execution of International conference. The Head – R&D has internally constituted a streering committee for the conduct of the conference and look into the following matters:

1. Content development

#### 2. Design and printing

- 3. Promotion
- 4. Technical review
- 5. Logistics
- 6. Communications
- 7. Accounts
- 8. Liasoning with experts
- 9.Logistics
- 10. Working committees on the days of the conference

#### **Outcome:**

ICRIEAT 2016 held on 22-23rd December 2016 was delighted with the Research experiences of World class professionals from USA, Australia, Malaysia, Oman and the host country India. Eminent Professors from IITs and NITs have come forward to deliver their innovations and findings on latest technologies. Top notch Industrialists, Technology experts and Scientists presented their new avenues of the Technological development to the conference delegates. There were 13 keynote lectures covering the different areas of the conference. The keynote lectures and the technical presentations bridged the gap between the different fields of Engineering, making it possible for non-experts in a given area to gain insight into new areas. 356 scientific participants have contributed their research articles and findings. Out of which 10 are from foreign counties namely, USA, Germany, Ethiopia, Malaysia, and Saudi Arabia, 70 papers are from IIT/NIT/universities, 72 are from other states of the country and the industry personals while 131 from Telangana State. The Conference provided a setting for discussing recent developments in Engineering and Technology. It has been a good opportunity for participants coming from various parts of the country to present and discuss topics in their respective research areas.

The conference was a huge successful in 2016 and has given an inspiration to be continued in the same pace for 2017 also.

File Description	Document
Link for Additional Information	View Document

#### **6.3 Faculty Empowerment Strategies**

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

**Response:** 

Welfare measures for teaching staff

- 1. Special leaves for faculty who have registered for PhD attending Pre phd examination, course work, Review meetings, colloqium and viva voce examination.
- 2. Management sponsors the tution fee for faculty persuing PhD who have put in 5 years of service
- 3. Retention allowance of Rs 2000, Rs 3000, Rs 4000 and Rs 5000/- is given per month to all the faculty who have put in 5, 7 <sup>1</sup>/<sub>2</sub>, 10 and 12 years above service at Aurora.
- 4. Free health checkup camp is arranged once in a semester
- 5. Annual sports meet is conducted to the faculty for their recreation an fitness
- 6. College CUG phone number is alloted to each of the faculty and an amount of Rs 280/- per month is borne by the management.
- 7.100% fee concession to children of our faculty studying in any of the Aurora colleges
- 8. Free news paper (The Hindu) distribution to all the faculty
- 9. Monthly Conveyance allowance is given to the Principal
- 10. Conveyance allowance is given to Deans, HoDs and other coordinators as and when they travel out of college on official works
- 11. Pay for performance scheme for faculty at annual increments
- 12. Complementary refreshments are given to the faculty performing invigilation duties
- 13. Annual faculty outing is conducted for recreation
- 14. Awards to staff on teacher's day for excellent contribution and performance
- 15. Daily twice coffee is given as complementary to all the faculty
- 16. Relocation allowance for outstation faculty at the time of joining
- 17. Children educational allowance upto 10th class for all the non teaching staff
- 18. Medical insurance to all the staff

#### Welfare measures for non- teaching staff

- 1. Free health checkup camp is arranged once in a semester
- 2. Annual sports meet is conducted to the faculty for their recreation an fitness
- 3. College CUG phone number is alloted to each of the faculty and an amount of Rs 280/- per month is borne by the management.
- 4.100% fee concession to children of our faculty studying in any of the Aurora colleges
- 5. Free news paper (The Hindu) distribution to all the staff
- 6.Conveyance allowance is given to technical staff and office staff as and when they travel out of college on official works
- 7. Annual Awards to staff for excellent contribution and performance
- 8. Quarters for supporting staff in the campus
- 9. Free transport for non- teaching staff
- 10.100% fee concession to children of our staff studying in any of the Aurora colleges
- 11. Daily twice coffee is given as complementary to all the staff members
- 12. Special leave is granted to the staff members persuing higher education to appear for examinations
- 13. An exclusive lunch is organized for the staff annually

File Description	Document
Any additional information	View Document

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

#### Response: 9.81

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

2016-17	2015-16	2014-15	2013-14	2012-13
36	1	16	104	0

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

#### **Response:** 2.8

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

2016-17	2015-16	2014-15	2013-14	2012-13
3	2	3	6	0

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

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

#### Response: 11.68

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

2016-17	2015-16	2014-15		2013-14	2012-13	
50	42	51		68	0	
File Description	on		Docun	nent		

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

#### **Response:**

The quality of education and training being imparted in the institutions depend on the quality of the faculty available. The standards of an educational institution rely on student and faculty outcomes in terms of measurable parameters. In order to meet the standards of Higher Education, Aurora's Appraisal System (AAS) is developed in a systematic way to assess a faculty's job performance and productivity in terms of key performance indicators (KPIs). This aids in faculty communication with the management to express their areas of excellence, establish personal goals and there by enhance quality of teaching. It is also being designed to foster faculty development and identify opportunities for additional support required. Also, decisions such as promotions, increments, transfers etc are based on this process of evaluation. Each faculty has to file the Aurora's self appraisal form and submit to the respective Head of the Departments at the end of an academic year. The self appraisal form is an evaluating tool for the KPIs identifies. Along with the KPI score obtained though the self appraisal by the respective faculty, peer appraisal, appraisal by Head of the department and appraisal by Head of the institutions are also weighted. The final score in AAS is calculated as follows:

S.No	Component	Max score
1	Self appraisal	960
4	Peer appraisal	10
5	HoD appraisal	15
6	Principal appraisal	15
	Total	1000

AAS is developed to focus on various governing parameters for an organization. The results of evaluation through the AAS not only impact the faculty but also equally reflects on the students, institution, HR and the management. The following are the outcomes of AAS with respect to the target groups.

S.No	Target	Outcome	
1	Students	Quality education	
2	Faculty	Goal Setting	
		• Training needs	
		• Personal strength & weakness identification	
		• Increments	
		Promotions	

		• Incentives
		Competition among colleagues
3	Institution	Performance
		Goal achievements
		• Development needs
		• Training Needs
		• Feedback
4	HR department	Policy documentation
		Legal Requirements
		• Transfers and appointments
5	Management	Organizational Goal achievements
		Retention / Termination
		HR Planning
		HR Evaluation
		Validation Research
		Institutional needs

AAS employs the process of faculty performance evaluation based on the following KPIs drawn from the job responsibilities:

- 1. Lectures taken
- 2. Implementation of session plan
- 3. Practical and tutorialsundertakenaspercentageofthoseactualallocated
- 4. Lectures, tutorials and practical sundertakeninexcess of the allocation
- 5. Interaction with student outside the classroom
- 6. Curriculum development
- 7. Learning & Resource Material developed
- 8. Laboratory Development
- 9. Project work supervision
- 10. Impartingofknowledge/instructionvisaviswiththeprescribed material as per thecurriculum
- 11. Student feedback
- 12. Result obtained in the subjects handled
- 13. End semester examinationduties

- 14. Mid semester examinationduties
- 15. Additional examination works
- 16. UseofInnovativeteaching–learningmethodologies
- 17. NumberofRemedial/BridgeCourses andCounselingmodulesdeveloped and imparted
- 18. Student Assignments
- 19. Student seminars
- 20. Guest lectures
- 21. Industrial visits/educational tours/field trips
- 22 Student mentoring
- 23. Extra curricular activities organized
- 24. Membership in professional organizations
- 25. Participation in training courses
- 26. Qualification enhancement
- 27. Discipline specific Awards/ recognitions etc

28. Refresher courses, workshops, Training, Teaching-Learning-Evaluation, technology Programmes, Soft Skills development Programmes, Faculty Development Programmes attended

- 29. Research Papers published in journals
- 30. Research Papers published in conference proceedings
- 31. Research Papers/posters presented orally in conferences /seminars /workshops /symposia
- 32. Text Books published
- 33. Research supervision
- 34. Sponsored ResearchProjects
- 35. ConsultancyProjects
- 36. ProjectsOutcome/Outputs
- 37. Invited lectures/ presentations/chair for conference/symposium

- 38. InstitutionalGovernanceresponsibilities
- 39. Extension activities

#### 6.4 Financial Management and Resource Mobilization

#### 6.4.1 Institution conducts internal and external financial audits regularly

**Response:** 

#### Internal audit:

College conducts the internal as well as external financial audits regularly. Every financial year internal audit is conducted with the help of the accounts staff. The internal financial accounting would be completed before 10th of every month considering all the previous month transactions. After completion of the monthly accounts the same accounts would be audited by the internal auditors. The internal auditor team cross checks and verifies these calculations and also finds out the shortcomings/ errors and rectifies the same. These errors/ shortcomings are explained to the College Accountant and the Office Superintendent. The errors/ shortcomings in the accounts are rectified as per the instructions of the Internal Audit team immediately. After rectifications if any, the report would be submitted by internal auditors to the Principal for approval.

#### **External audit:**

The external auditor visits the College office twice every year and checks the books of accounts and then prepares his Report & Audited statement which is presented in the Governing Council Meeting conducted in the month of June every year. The short comings and errors/ rectifications in the audit are enlisted in the report of the external auditor's report.

#### Case study:

#### 31st March 2016 (Report Dt. 20-5-2016)

Shortcomings/ Remarks by the Auditor:

Certificate of Physical Cash Verification not produced.

#### Suggestion by the Auditor:

1. Physical Cash in hand should be verified in the last hour by the Head of the Institutionand same should be duly signed.

2. Daily cash records should be maintained in the Cash book to keep the control on Cash.

3. There should be no difference in the Institutional Balances hence reconciliation and confirmation must be properly done.

**Implementation:** O.S. (Office Superintendent) & Principal instructed the respective clerks to follow the instructions on immediate basis.

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

#### Response: 2.83

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

2016-17	2015-16	2014-15	2013-14	2012-13
0.64	0.60	0.56	0.53	0.5

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

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

#### **Response:**

Mobilization of Funds:

The fee collected form the students (in the form of DDs) are deposited in the Bank Account of the College. Scholarships from the Governement are periodically received and the share of Tution Fees & other College fees get deposited in the Bank Account of the College. Individual donations are also received from the eminent personalities of the Soceity. Our promoting society also receives funds and donations from various sources which is utilized for the College development time to time.

Optimal utilization of Resources: The College class rooms and computer laboratories are rented out for the variuos Government Exams on College Holidays/ Sundays etc. (TSPSC, TCS, Bank Officers' Exam etc. The old news papers, used papers, scrap material is sold out to recycling units once in an year. The college ground is rented out to various organization to conduct sports to its employees. Alummi contribution and funds received through consultancy (college share) is also another source of revenue. The revenue generated through these activities is mobilized through our Society (Ravi Rishi educational society).

Optimal utilization of funds is ensured through the following:

1. Adequate funds are allocated for effective teaching-learning practices that include conduct of FDPs,

orientation programs, workshops, inter-disciplinary activities, training programs that ensures quality education.

2.Adequate remuneration based on the performance–quotient of the teaching professionals is provided.

3. The budget will be utilised to meet day-to-day operational and administrative expenses and maintenance of the fixed assets.

4. The grants received from the external funding agencies are effectively utilized in implementation of projects by procuring the suitable equipment. This equipment is further utilized in the established advanced laboratories of the institute. Availability of such equipment has further improved the research interest of the faculty and students.

5.Enhancement of library facilities leads to novel learning practices and accordingly requisite funds are utilized for this every year.

6.Adequate funds are utilized for development and maintenance of very good infrastructure for the institute.

7.Some funds are allocated for social service activities as a part of social responsibility.

#### 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

#### **Response:**

The IQAC of the College was established in June 2017.

The IQAC of the College is involved in strengthening the quality policies for Teaching-Learning, Research, Curriculum analysis and implementation, Student activities, innovation, extra- curricular and co-curricular activities.

#### Quality parameters developed for various academic / administrative activities of the institute.

The following strategic measures have been taken by the IQAC for quality assurance:

- 1. Assessing the quality parameters for improving the standards
- 2. Organizing induction program to the newly joined faculty
- 3. Planning technical events
- 4. Action plan for enhancing pass percentage
- 5. Take Feedback from the stakeholders

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

#### **Response:**

The institution has been reviewing teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals well before the establishment of the IQAC cell. The various methodologies adopted are as follows:

- 1. Taking student feedback at the middle and end of the semester
- 2. Assessing the learning levels of the students as slow and advanced learners
- 3. Conducting remedial classes for slow learners
- 4. Encouraging advance dlearners to take up internships, certification and value added courses.
- 5. Mapping the course outcomes and program educational outcomes
- 6. Evaluating the student feedback and analysing accordingly.
- 7. Counsel faculty with below average performance
- 8. Encourage faculty to take up ICT teaching

9. Evaluate the learning levels of the students through interactive teaching learning process - team work, group discussion, student seminars.

10. Assess the impact of the industry institte interaction for activities like guest lectures, workshops, industrial visits, internships.

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

#### **Response:** 3.6

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

2016-17	2015-16	2014-15	2013-14	2012-13
8	6	2	1	1

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 institut	tion include:
이는 것 같은 것 같	surance Cell (IQAC); timely submission of Annual AAC; Feedback collected, analysed and used for and initiation of follow up action
A. Any 4 of the above	
B. Any 3 of the above	
C. Any 2 of the above D. Any 1 of the above	
<b>Response:</b> B. Any 3 of the above	
File Description	Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	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)* 

#### **Response:**

The following are the improvements made during the preceeding five years:

#### 2016-17

- 1. Implementation of outcome based education
- 2. PEOs, Pos and Cos have been framed for all the programs
- 3. Mandatory internship to 3rd yr students
- 4. Increased number of PhD holders

- 5. Established Thermodynamics Lab in Mechanical Engineering Department
- 6. Choice base credit system has been introduced

#### 2015-16:

- 1. Organized First International Conference
- 2. Free news paper distribution to staff and students
- 3. All classromms are equipped with LCD projectors
- 4. Biometric attendace system for faculty
- 5. Established advanced embedded system laboratory in ECE department
- 6. Established Kinematics And Dynamics Laboratory in Mechanical Engineering Department
- 7. Enhanced internetbandwidth from 40 Mbps to 100 Mbps with wifi

#### 2014-15

- 1. Introduced NEPTEL courses to studnets
- 2. Commencement of Department libraries
- 3. In house training for campus placements
- 4. Commencement Monthly newsletter publication
- 5. Mandatory student seminars

#### 2013-14

- 1. Professional student chapters for students in IEEE, ASME and CSI
- 2. Enironmental science has been introduced as mandatory course
- 3. Mandatory Display of project work in project exhibition

#### 2012-13

1. Introduced Gold medal to college topper

- 2. Applied for NBA accreditation for 05 UG programs and 03 PG programs
- 3. New academic block has been inaugurated
- 4. Applied to UGC for Autonomous status

#### **Criterion 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

#### **Response:** 23

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

2016-17	2015-16	2014-15	2013-14	2012-13
7	5	5	3	3

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

#### 7.1.2

# 1. Institution shows gender sensitivity in providing facilities such as: 1. Safety and Security 2. Counselling 3. Common Room

#### **Response:**

Understanding the need to promote Gender equality, teachers and students are taught about gender sensitivity. All the teachers are tranied in the induction program to address the gender sensitivity through class room organization. The classroom organization goes a long way in shaping gender relations. Classroom environment can facilitate students learning and remove gender bias and stereotype. In fact, a gender friendly environment can easily be created by a teacher in any context. It just requires sensitivity and positive intent. A gender friendly classroom environment and its overall management builds harmonious relations between boys and girls. The college has adopted the following class room dynamics to create a better environment for learning:

-Teachers must define their roles as mentors and facilitators while addressing students. As a facilitator, the teacher should ensure that physical and social environment of the classroom promotes healthy relationships between boys and girls. Sitting arrangements and all activities are done in mixed groups.

-To address gender sensitivity in the classrooms, it is ensured that there exists democratic values and freedom among both boys and girls equally.

- Equal participation of boys and girls in teaching learning process is ensured. Group activities like mini projects, main projects, internships, debates, group discussions etc are given more importance such that greater gender sensitivity can be made.
- Allocation of classroom duties equally reflects gender neutrality.
- Allocation of responsibility of organizing technical events equally to both boys and girls.
- While teaching core subjects, care is taken to include examples of men and women scientics so that the message of equal capability gets highlighted.
- The classroom culture is built in a manner that interactions between boys and girls reflect mutual respect.
- Common unifrom to both boys and girls ( blue jeans , white shirt and sports shoes ) with an objective to promote best dressing culture and avoid discrimination.

Apart from the class room dynamics, the colleges has made the following facilities to ensure gender equity:

Safety and Security for female staff and students:

Round the clock security is made available at the gate. The college has female security at all the prominent locations. The College premises, laboratories and corridors are under video surveillance. Regular seminars and awareness programs are organized with the help of police department and SHE teams for Girl students. Irregular girl students are identified and the root cause of the problem is deciphered. In all the Industrial visits female faculty accompany the students.

#### Counselor

Our College has trained counsellor for the students. Students discuss their problems with the counsellor. Students are counselled on stress and anger management. Counselling offers assistance in: Identifying and clarifying issues.

Girl's Common Room:

The girls' common room is made available for girl students to relax. It is well ventilated, has washrooms, dressing mirrors, news papers along with a female attendant. A separate suggestion box is kept in college premises There are three female attendants who ensure safety of girls and also maintain cleanliness in the girls' common room. This room is located in on ground floor.

#### 7.1.3 Alternate Energy initiatives such as:

## **1.**Percentage of annual power requirement of the Institution met by the renewable energy sources

#### Response: 0.17

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

#### Response: 212

7.1.3.2 Total annual power requirement (in KWH)

Response: 127200

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Link for Additional Information	View Document

#### 7.1.4 Percentage of annual lighting power requirements met through LED bulbs

#### **Response:** 11.2

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

Response: 3584

7.1.4.2 Annual	lighting	power requirement	(in KWH)
/		pon or requirement	(111 11 () 11)

Response: 32000

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

#### **Response:**

The Institution is conscious of its responsibilities to the environment and has taken the following initiatives to maintain an Eco friendly campus:

Solid Waste Management:

- The major solid waste which is generated in the Campus includes Paper, Leaf litter and Kitchen waste.
- The policy adopted is to reduce, reuse and recycle the solid waste. Measures are being adopted to reduce carbon footprint and reduce paper waste to some extent. Both sides of the paper are used for printing. Papers printed on one side are to be used as envelopes and these can be duly stamped. One side used paper can also be sent to departments for use in class tests.
- The organic wastes are being recycled by adopting vermicomposting for leaf-litter and microbial composting for canteen- kitchen waste.Dry and wet waste from the college canteen and the food waste is duly separated and disposed.
- To collect the Sanitary waste red colored dustbins are separately kept in the washrooms which the housekeeping staff disposes off carefully

#### Liquid Waste Management:

- The rain water from the terrace is drained to the lawns for watering the lawns.
- Periodic check-up of plumbing lines is undertaken to ensure minimal loss of water due to leakage.
- Arrangements are being made to channelize the water coming out from the canteen to irrigate the lawns.
- Effective reuse of waste water from RO systems, distillation units and Air conditioners is being done for irrigating the green areas.

#### **E** – Waste Management:

- All electronic equipment used in the campus are regularly maintained and repaired to ensure minimum e waste.
- Most of the new electronic instruments, computers and peripherals are purchased under 'Buy Back Scheme' so that we do not accumulate e-waste.
- To dispose the e waste consisting of used printers, cartridges, discarded photocopy machine card, memory sticks, damaged PCs, CPUs, Laptops, certified professionals, e-cyclers preferably with ISO-14001 certification are being contacted. They will procure environmental systems for standard safe disposal of e- waste and obtain certificate ensuring destruction of data. This entire process is being outsourced.

#### 7.1.6 Rain water harvesting structures and utilization in the campus

#### **Response:**

- Rain water harvesting is carried out at different locations in the campus, in order to minimize the usage of water resources and to improve the water table. More than 10 million liters of Rain Water is being harvested annually covering over A and B blocks of the Campus.
- The rain water is diverted through wide shallow channels spread over the entire campus which are connected to the North East end of the campus, thus ensuring the conservation of rainwater.
- Rain water is also harnessed in 2 tanks, for further use in the supporting staff quarters and other

regular water requirement in the campus. The harvested water is to be filtered, chlorinated and supplied.

- Rain water is also harnessed in 2 tanks, for further use in the supporting staff quarters and other regular water requirement in the campus.
- Wastage of water is prevented by using sprinkler irrigation system throughout the campus. Drip Irrigation designing is being proposed for newly planted trees.
- The harvested water is to be filtered, chlorinated and supplied.
- The quality of water is regularly monitored by collecting & analyzing water samples by the water quality management committee.
- The College also educates the students regarding rain water harvesting through different programmes on the occasions like world water day, Ozone Day, etc.

#### 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

#### **Response:**

Some of the steps in achieving carbon-neutralityare reduction of carbon emission, energy conservation measures and periodical Tree plantation in the campus are as follows:

- Students are not allowed to enter into the campus with their vehicles. in order to prevent carbon emission.
- Staff Vehicles entry into the campus is permitted and specific parking area is allotted.
- One tree can off- set 0.8 ton of carbon dioxide therefore one of the major measures taken up by the college is to plant trees and maintain them.
- We do not use chemical Fertilizers/ Weedicides or Insecticides in any of our garden space.
- Refurnishing of the interiors is generally avoided. If need be, then emphasis is laid on the reuse of wood and iron.
- We have switched to the use steel storage cabinets thereby cutting down on the use of wood.

#### **Plastic Free Campus:**

Use of Plastic & Polythene items are strictly restricted inside the campus. Awareness programmes on plastic free environment are conducted regularly, by the NSS unit in and around the college. We do not use plastic plates and cups in our canteen.

**Paperless Office:** The main office and all departments are instructed not to take printouts unless it is very essential. All messages to faculty and students are conveyed by emails and messages through social networking platforms. This reduces waste generation at the source to a greater extent.

**Green Landscaping - Plantations:** The entire campus is filled with greenery, by the continuous efforts taken by the institution. The built up area is 40% and rest of the area is categorized as lawns, playground, etc. The campus has about 400 trees and various types of shrubs. Regular maintenance of the plantation within the campus, is done by well-trained hardworking team of gardeners. The institution takes up the Plantation programs at regular intervals of time on earth day and environment day, for increasing the Green Cover, in which huge number of trees are planted in and around the campus. The staff and students are all proactive in maintaining and preserving the green cover and conscious for cleanliness also.

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

#### Response: 0.51

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

2016-17	2015-16	2014-15	2013-14	2012-13
5.98	4.85	5.46	4.23	3.28

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

#### 7.1.9 Differently abled (Divyangjan) Friendliness 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)

#### A. 7 and more of the above

- **B.** At least 6 of the above
- C. At least 4 of the above
- **D.** At least 2 of the above

#### **Response:** A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
link to photos and videos of facilities for Divyangjan	View Document

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

#### Response: 15

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

2016-17	2015-16	2014-15	2013-14	2012-13
5	3	3	2	2

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)

#### **Response:** 15

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

2016-17	2015-16	2014-15	2013-14	2012-13
5	3	3	2	2

File Description	Document
Report of the event	View 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

#### **Response:** Yes

File Description	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 Response: Yes File Description Document

Provide URL of website that displays core values	View Document
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## 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

#### Response: 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

#### Response: Yes

File Description	Document
Any additional information	View 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

Response: Yes

File Description	Document
Any additional information	View 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

#### **Response:** 7

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

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

#### **Response:**

National Festivals are celebrated with enthusiasm. Our students are on a mission towards better India. They come together breaking the boundaries of religion and caste. Thoughts of great Indian personalities sowed into the young minds through the various programmes conducted on these days. The Institution organizes various events activities relating to national festivals, birth/death anniversaries of the great Indian personalities for every year:

S. No.	Title of the programmeDate of celebration
1	Youth Day (Swami Vivekananda Birth12th Jan Anniversary)
2	January Netaji SubhashChandra Bose Birth23rd Jan

	Anniversary	
3	Republic day	26th jan
4	National Science Day	28th Feb
5	Women's Day	8th March
6	Bharat Ratna Dr.Babasaheb Ambedkar Bir Anniversary	rth14th April
7	International Yoga Day	21st June
8	Independence Day	15th Aug
9	Teachers Day (Dr.Sarvpalli RadhaKrishn BirthDay)	an5th Sep
10	Hindi day	14th Sep
11	Engineers Day	15th Sep
12	Mahatma Gandhi Jayanti	2nd Oct
13	Dr. APJ Abdul Kalam Birth Anniversary	15th Oct
14	Rastriya ekta diwas (Sardar Vallabh Bl Patel Birthday)	nai31st oct
15	National education day	11th nov
16	National voter's day	25th jan

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

#### **Response:**

Our institution believes in maintaining complete transparency in its financial, academic, administrative & auxiliary functions.

#### 1. Financial matters:

Internal & external auditors are conducted every year. This is a regular practice and the audited statements are produced in the Governing body meeting. Financial power is delegated to the head of the department, deans and the principal as follows:

S.No	Role	Amount
1	HoDs	Rs 50000
2	Deans	Rs 50000
3	Principal	Rs 2 lakhs
4	BoG	> 2 lakhs

2. Academic & Administrative matters:

An internal academic and administrative Audit is conducted annually and transparency is maintained. Heads of all the departments, deans and senior faculty members are assigned this task. The report is submitted to the BoG. The information regarding the College is freely made available to the public through our website. As the College is under RTI all the information is made available to the public.

#### 3. Auxiliary functions

We always take care of our students from their enrollment to their overall development. Recruitment of faculty & all necessary procedures are practiced as per the guidelines given by higher education department, University & UGC. All circulars regarding, students, teaching staff &non teaching staff are circulated & displayed on the notice boards. Planning & execution of different auxiliary functions are discussed in the college development committee meetings. The decisions taken are communicated to all stake holders of our institution.

#### 7.2 Best Practices

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

**Response:** 

**Best Practice - I** 

**Title of the Practice:** 

Value-Added Courses for students throughout their period of study.

#### **Objectives of the Practice**

- Bridge the gap between Industry and academia
- Enrich the students with more knowledge
- Cope up with recent trends in respective subjects
- Inculcate continuous learning among students

#### The Context

As an affiliated institution, we have to follow the university curriculum only. Due to the rapid development in the field, students are to be equipped accordingly. Value added courses serve as a platform to bridge the gap between the industry and academia.

#### **The Practice**

- Eminent resource persons are invited from Industries, Govt. Departments and Research organizations.
- Hands-on training sessions are scheduled for the students.

#### **Evidence of Success**

- As students get trained in the requirements needed by the industry, placements are increased
- The number of students getting projects in industries is increasing
- The quality of projects done by students has been increased
- The confidence levels of the students is found to be increased

#### **Problems Encountered and Resources Required**

- Need to purchase latest hardware and software
- To spend more time after regular college hours, transport facility is required

**Best Practice - II** 

#### **Title of the Practice**

Promotion of Research

#### **Objectives of the Practice**

- Encourage the faculty to pursue Ph.D.
- Arrange for interface among the institutions and industries to take up research projects
- Encourage faculty and students to present research papers in the National / International seminars / conferences / Journals

#### The Context

The College mainly focus is on quality research. It has created a research ambience through strengthening infrastructure facilities, motivating staff members and guiding them to involve in Research and development.

#### **The Practice**

A Research Committee is constituted to promote research culture among staff and students. The institution provides opportunities to the faculty to persue Ph.D. Faculty is granted speacial allowance after clearing their Pre Phd examination and also are encouraged by sponsoring their tution fee and grant of speacial leaves during the days of Pre phd examination, course work, Review meetings, colloqium and viva voce

examination.

#### **Evidence of Success**

· 24 faculty are persuing Phd

- 06 faculty were awarded with PhD in 2017
- 2 faculty are University approved supervisors for guiding Ph.D. scholars.
- Increased number of publications
- Increased consultancy works
- Continously receiving funding for Research

#### **Problems Encountered and Resources Required**

· procuring funds from various funding agencies.

- Limited admissions in local universities for PhD
- Ph.D. holders can be motivated to publicize their research in the form of books.

#### **Other best practices**

- 1. Gold medal to college topper at convocation
- 2. Awards to staff on teacher's day
- 3. Common uniform to both boy's and Girl's promoting gender equity
- 4. Publication of college monthly newsletter
- 5. Free news paper distribution to staff and students
- 6. Free quarters for support staff
- 7. Fee concession for financially poor students
- 8.100% fee concession to employee wards studying in Aurora colleges
- 9. International conference every year

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

#### **Response:**

Our Vision is

Aurora envisions 'to make itself synonymous with learning'. We aim to equip our students with a perfect combination of profound knowledge with humane values.

The college is generating graduates with commitment to societal needs and good entrepreneurial and managerial skills to face any challenging situations.

To achieve the vision of the institution, the following activities are prioritized and implemented in the campus

All faculty members are preparing course files, lesson plans for each subject for effective teaching-learning process. They also develop laboratory manuals for all labs for good conduction of the laborites. All efforts are made to maintain the quality sustenance in curriculum delivery to achieve our vision.

Course files are prepared in detail by faculty which includes:

- Syllabus copy with text books and reference books
- Academic calendar
- Course time table
- Course Outcomes
- Handouts and Lecture notes
- Copies of OHP transparencies/PPT slides, if any
- Question papers of Internal Examination Tests, additional Tests and assignments
- University question papers of present and previous two years
- Content beyond syllabus

Lesson plans prepared by individual faculty that include:

- Course objectives and outcomes
- Session plan

• Text books and reference books

The progress of syllabus coverage is monitored periodically by the respective Heads.

Apart from teaching -learning, the following activities are being conducted for students to get knowledge

- 1. Periodic workshops, seminars and guest lectures.
- 2. Placement training
- 3. Industrial visits
- 4. Certification courses
- 5. Industrial visits and internships.
- 6. Paper presentations and participation in technical events

To import the human values to the students the following events are being conducted for students

- 1. Iftar party
- 2. Guru Poornima
- 3. Friendship Day
- 4. Andri (B.Tech Orientation)
- 5. Short Film Competition
- 6. Bathukamma Celebrations
- 7. Mr.Fresher&Ms. Fresher Contest

(Radio Mirchi)

- 8. Traditional Day
- 9. Arena One
- 10. Republic Day
- 11. Engage MirchiFreshers 2K15 Grand Finale
- 12. Voter Awareness Program



### **5. CONCLUSION**

#### **Additional Information :**

1. A SWOC Analysis was carried out internally with the help of few advisors keeping in view the vision map of the institution. The HoDS, Coordinators, Faculty and Students were interviewed and a report on the findings was prepared. The SWOC analysis was conducted by having brainstorming sessions at the department level and institute level involving all stake holders.

The SWOC analysis has been conducted by taking the following inputs into consideration:

- 1. Faculty Interaction
- 2. Students' feedback
- 3. Alumni feedback
- 4. Industry feedback
- 5. Parents-Teachers meeting feedback
- 2. 6. Feedback of Administrative staff
- 3. 7. Feedback of Non teaching staff
  - 8. Feedback reports of the committees from University.
  - 9. Analysis of results of past years.

The inputs provided by various stakeholders were categorized into different groups such as general observations, resources, academics, policies and administration, R&D, Industry-Institute interaction, cocurricular and extra- curricular activities, Alumni and Training and Placement.

#### **Concluding Remarks :**

The following strategies are planned to enhance teaching learning process, improving employability of the students at our college:

- 1. Strict implementation of on Outcome Based Education
- 2. Offer scholarships to attract talented students to gain competitive advantage
- 3. Strengthen Industry Institute Partnership Cell & Improve Industry collaboration.
- 4. Add more effectiveness for Career Guidance, Training and Placement activities and train the students as per the industry needs.
- 5. Improve soft skills and leadership qualities to students through experiential learning

- 6. Promote interaction with premier institutions to enhance and scaling up R&D and Collaborative Research activities.
- 7. Obtain accreditation through various accreditation benchmarking agencies within 1 year.
- 8. Obtain 2(f) and 12(b) within 1 year.
- 9. Improvement in academic performance by achieving Autonomy in 2 years.
- 10. Achieve Deemed to be university status in next 5 years.

## **6.ANNEXURE**

	Sub Questions ar					1			
1.3.3	Percentage of stu	dents under	taking field	l projects / i	nternships				
	1.3.3.1. Number of students undertaking field projects or internships								
	Answer before DVV Verification : 1719 Answer after DVV Verification: 681								
	Answer aft	ter DVV Ve	rification: 6	581					
2.1.2	Average Enrollment percentage								
	(Average of last	five years)							
	2.1.2.1. Numb Answer be	per of studer fore DVV V		•	during the l	ast five years			
	2016-17	2015-16	2014-15	2013-14	2012-13				
	0	483	721	540	581				
	Answer At	fter DVV V	erification :			_			
	2016-17	2015-16	2014-15	2013-14	2012-13	_			
	0	483	721	540	581				
	2.1.2.2. Numb Answer be	oer of sancti fore DVV V			uring the las	st five years			
	2016-17	2015-16	2014-15	2013-14	2012-13				
	1458	1572	1572	1500	1308				
	Answer At	fter DVV V	erification :			-			
	2016-17	2015-16	2014-15	2013-14	2012-13				
	1458	1572	1572	1500	1308				
	Remark : The	data of Nur	nber of stud	dents admitt	ed for 2016	5-17 is not provided by HEI.			
2.1.3	Average percentareservation polic	0	U		erved for va	arious categories as per applicable			
	five years	per of actual fore DVV V			n the reserv	ed categories year-wise during the la			
	2016-17	2015-16	2014-15	2013-14	2012-13	]			
						-			

	2016	-17 2015-16	2014-15	2013-14	2012-13			
	0	162	198	190	207			
		Number of stu not provided by		ed from the	reserved cate	gories year	r wise relevant supp	ortin
2.6.3	Average pas	s percentage o	f Students					
	Answ Answ 2.6.3.2.7 institution Answ Answ	er before DVV er after DVV	Verification Verification: f final year st Verification Verification:	: 2268 195 tudents who : 2698			conducted by Instit	
3.1.2	Percentage of	of teachers reco	ognised as res	search guide	s at present			
	Answ Answ	nber of teacher er before DVV er after DVV Supporting do	Verification Verification: 1	.: 2 3		1.		
	Number of I	books and chap			ooks publishe acher during			
3.3.5	national/inte							
3.3.5	3.3.5.1. T national/inte		erence-proce	edings year-		-	ublished, and papers	s in
3.3.5	3.3.5.1. T national/inte	Cotal number o ernational confi er before DVV	erence-procee	edings year-		-		s in
3.3.5	3.3.5.1. 7 national/inte Answ	Cotal number o ernational confi er before DVV	erence-procee	edings year- :	wise during the	-		s in
3.3.5	3.3.5.1.7 national/inte Answ 2016 6	Fotal number oernational conferenceer before DVV-172015-16	Verification 2014-15 5	edings year- : 2013-14 7	wise during the 2012-13	-		s in
3.3.5	3.3.5.1.7 national/inte Answ 2016 6	Cotal number o ernational confi er before DVV -17 2015-16 80 er After DVV	Verification :	edings year- : 2013-14 7	wise during the 2012-13	-		s in
3.3.5	3.3.5.1.7 national/inte Answ 2016 6 Answ	Cotal number o ernational confi er before DVV -17 2015-16 80 er After DVV	Verification :	edings year- : 2013-14 7	wise during the 2012-13 3	-		s in

3.5.2.1. Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

		Answer be	fore DVV V	Verification	•	1
		2016-17	2015-16	2014-15	2013-14	2012-13
		8	3	2	1	1
		Answer Af	ter DVV V	erification :		
		2016-17	2015-16	2014-15	2013-14	2012-13
		5	3	2	2	1
5.1.1	during	g the last fiv 1.1.1. Numb wise during	age of stude we years per of studer the last five fore DVV V	nts benefited years	d by scholar	
		2016-17	2015-16	2014-15	2013-14	2012-13
		840	1236	1275	1312	1205
		Answer Af 2016-17	ter DVV V 2015-16	erification : 2014-15	2013-14	2012-13
		840	1238	1275	1312	1205
5.1.2	beside	es governme 1.2.1. Total ution beside	nge of stude ent schemes number of s s governme fore DVV V	s during the students ber nt schemes	last five ye nefited by so year-wise c	ars cholarships,
		2016-17	2015-16	2014-15	2013-14	2012-13
		277	281	249	13	12
		Answer Af	ter DVV V	erification :		
		2016-17	2015-16	2014-15	2013-14	2012-13
		299	281	249	13	12
5.1.4			a mismatch age of stude			

#### counselling offered by the institution during the last five years

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

	Ans	swer bef	fore DVV V	verification:			•		
	20	)16-17	2015-16	2014-15	2013-14	2012-13			
	292	02	354	393	331	280			
	Ans	swer Aft	ter DVV Ve	erification :					
		016-17	2015-16	2014-15	2013-14	2012-13			
	120	20	250	250	250	120			
5.2.1	Average r	percenta	ge of place	ment of out	going stude	nts during t	e last five ye	ears	
	Ans	swer bef	Fore DVV V	Verification:			g the last fiv	e years	
		016-17	2015-16	2014-15	2013-14	2012-13			
	249	.9	293	301	252	224			
	Ans	swer Aft	ter DVV Ve	erification :		×			
	20	016-17	2015-16	2014-15	2013-14	2012-13			
	14	6	249	293	301	214			
5.3.1	Number o	of award	s/medals fo	or outstandin	ng performa	ince in sport		ivities at nation the last five yea	
5.3.1	Number o internation 5.3.1.1 national/in last five ye	of award nal level . Numbe nternatio years	s/medals fo l (award for er of award onal level (a	or outstandin a team eve s/medals fo award for a	ng performa ent should b r outstandir team event	nce in sport e counted as	one) during		ars. es at
5.3.1	Number o internation 5.3.1.1 national/in last five yo Ans	of award nal level . Numbe nternatio years	s/medals fo l (award for er of award	or outstandin a team eve s/medals fo award for a	ng performa ent should b r outstandir team event	nce in sport e counted as	one) during	the last five yea	ars. es at
5.3.1	Number o internation 5.3.1.1 national/in last five yo Ans	of award nal level . Numbe nternatio /ears swer bef	s/medals fo l (award for er of award onal level (a fore DVV V	or outstandin a team even s/medals fo award for a Verification:	ng performa ent should b r outstandir team event	ince in sport e counted as ng performa should be c	one) during	the last five yea	ars. es at
5.3.1	Number o internation 5.3.1.1 national/in last five yo Ans 20 3	of award nal level 1. Numbo nternatio vears swer bef 016-17	s/medals fo l (award for er of award onal level (a Sore DVV V 2015-16 9	or outstandin a team even s/medals fo award for a Verification: 2014-15 5	ng performa ent should b r outstandir team event 2013-14	ance in sport e counted as ng performa should be c 2012-13	one) during	the last five yea	ars. es at
5.3.1	Number o internation 5.3.1.1 national/in last five yo Ans 20 3 Ans	of award nal level 1. Numbo nternatio vears swer bef 016-17 swer Aft	s/medals fo l (award for er of award onal level (a Sore DVV V 2015-16 9 ter DVV Ve	or outstandin a team even s/medals fo award for a verification: 2014-15 5 erification :	ng performa ent should b r outstandir team event 2013-14 2	ince in sport e counted as ng performa should be c 2012-13 0	one) during	the last five yea	ars. es at
5.3.1	Number o internation 5.3.1.1 national/in last five yo Ans 20 3 Ans	of award nal level 1. Numbo nternatio vears swer bef 016-17	s/medals fo l (award for er of award onal level (a Sore DVV V 2015-16 9	or outstandin a team even s/medals fo award for a Verification: 2014-15 5	ng performa ent should b r outstandir team event 2013-14	ance in sport e counted as ng performa should be c 2012-13	one) during	the last five yea	ars. es at

	Answer be				Ì		
	2016-17	2015-16	2014-15	2013-14	2012-13		
	36	21	16	104	12		
	Answer Af	ter DVV V	erification :				
	2016-17	2015-16	2014-15	2013-14	2012-13		
	36	1	16	104	0		
nstit 6.	ution for tea 3.3.1. Total e Institution	ching and n number of j	on teaching professional g and non te	staff durin developme eaching staf	g the last fiv ent / adminis	ining program years rative trainin uring the las	ng progra
	2016-17	2015-16	2014-15	2013-14	2012-13		
	1	1	3	6	1		
	2016-17 3	2015-16	2014-15 3	2013-14 6	2012-13 0		
	ram, Refresh	ner Course,	Short Term teachers atte	Course, Fa	culty Develo	ent programs pment Progra elopment pro pment Progra	am durin ograms, v
6. Progi	ram, Refresł ive years				culty Develo		
Prog	ram, Refresł ive years	ner Course,			2012-13		
6. Progi	ram, Refresh ive years Answer be	her Course, fore DVV V	verification:	:			
6. Progi	ram, Refresh ive years Answer be 2016-17 50	fore DVV V 2015-16	Verification: 2014-15 51	2013-14	2012-13		
6. Progi	ram, Refresh ive years Answer be 2016-17 50	fore DVV V 2015-16 42	Verification: 2014-15 51	2013-14	2012-13		

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

#### Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
6	5	5	3	2

#### Answer After DVV Verification :

2016-	17 2015-16	2014-1	5 2013-14	2012-13
5	3	3	2	2

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 before DVV Verification : 26 Answer After DVV Verification :7

#### **2.Extended Profile Deviations**

ID	Extended (	Questions								
1.3	Number of outgoing / final year students year-wise during the last five years									
	Answer before DVV Verification:									
	2016-17	2015-16	2014-15	2013-14	2012-13					
	319	626	793	571	389					
	Answer Af	fter DVV Ve	erification:			-				
	2016-17	2015-16	2014-15	2013-14	2012-13					
	195	531	689	518	335					
	L					1				
Ans	Total number of outgoing / final year students									
		Answer before DVV Verification: 2698								
	Answer after DVV Verification : 2268									
2.5	Number of teachers recognized as guides during the last five years									
	Answer before DVV Verification : 5									
	Answer after DVV Verification : 2									
3.3	Number o	foomputora								
5.5		Number of computers Answer before DVV Verification : 690								
	Answer after DVV Verification : 710									