



# **SELF STUDY REPORT**

**FOR**

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

**KAVIKULGURU INSTITUTE OF TECHNOLOGY AND  
SCIENCE, RAMTEK**

**K. K. NAGAR, MOUDA ROAD, RAMTEK, DIST. NAGPUR  
441106  
[www.kits.edu](http://www.kits.edu)**

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

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# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Kavikulguru Institute of Technology and Science (KITS), Ramtek, is a self- financed and non minority engineering Institution run by Vodithala Education Society, Hyderabad with an objective of providing quality technical education to rural students. The Institute is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur. The Institute offers four year undergraduate engineering programs in seven departments and a five year program in Bachelor of Architecture (B. Arch.). It also offers post graduate programs in four departments and Ph.D. research center in two departments. All the programs are approved by All India Council for Technical Education (AICTE), New Delhi. The B. Arch. program is also approved by Council of Architecture(COA). The Institute has lush green campus sprawling over an area of about fifty acres. The Institute was awarded with 'Best Infrastructure in Maharashtra' by All India Technical and Management Council, New Delhi in year 2014. The Institute is well known for its discipline, providing quality education, concern for the society and environment. Students are sensitized towards social and environmental issues through National Service Scheme (NSS), National Cadet Core (NCC) and other forum activities. The focus is to inculcate continuous learning habit with positive attitude and ethically sound values within the faculty and students. The Institute has always envisioned instilling life skills among the students through their participation in various curricular, extra-curricular and co curricular activities. The objective is to unleash human potential within the students to be excelled in their chosen fields.

### Vision

To develop the Institute into a center of excellence in professional and technical education.

### Mission

To serve the nation by nurturing and developing professional technocrats and managers who would contribute to nation building.

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

### Institutional Strength

- The Institute has permanent affiliation by RTMNU, Nagpur.
- The Institute has been awarded 'A' Grade by State Government during 1997 and 2000.
- The Institute has received the accreditation for engineering programs by National Board of Accreditation (NBA) for Civil Engineering, Mechanical Engineering, Electronics Engineering and Computer Technology during 2001 and 2006.
- The Department of Civil Engineering and Mechanical Engineering are recognized as Research Centres for Ph.D. by RTMNU.
- The Institute has received research funds of Rs.43.59 Lakhs from Board of Research in Nuclear Science, Department of Atomic Energy, Bhabha Atomic Research Centre, Mumbai for Civil

Engineering department.

- The Institute has received funding of Rs.44.78 Lakhs from Government of India for development of playgrounds and sport complex.
- The Institute has been recognized as Remote Center of IIT Bombay and IIT Kharagpur for conducting ISTE workshops under National Mission on Education through ICT (NMEICT), MHRD, New Delhi.
- The former Principals Dr. G. Thimma Reddy and Dr. Bhaskar Patel received 'Best Principal Award' in year 1998 and 'Ideal Principal Award' in year 2014 respectively.
- The Institute has contributed to Maharashtra Rural Water Supply and Sanitation "Jalswarajya" project initiated by Government of India and funded by the World Bank.
- The Institute has centralized library having more than 63,000 books with the Institute Book Bank Scheme (IBBS) and e-Journals.
- The Institute is having rain water harvesting systems and other innovative ecosystems.
- The Institute have various national and international student chapters and associations such as ISTE, IETE, IEEE and CSI along with department wise clubs and associations.

### **Institutional Weakness**

- Less placement in core companies.
- Less number of students progressing for higher education.
- Less research publications in peer reviewed international journal having high impact factor/IPR/patents.
- Low consultancy.

### **Institutional Opportunity**

- The Institute is putting efforts towards autonomous status for the academic flexibility.
- Development in Industry Institute Interaction due to progressive changes in industrial sector.
- Explore involvement of alumni in academic and placement activities.

### **Institutional Challenge**

- Improving the employability of the students coping up with rapidly changing technologies.
- Molding the students coming from rural areas and with low scores as per the requirement of the industry.
- To activate Entrepreneurship Development Cell with incubation center funded by AICTE.
- Placement opportunities in core companies.
- Enhancing expertise to attract industrial projects and consultancy.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

Kavikulguru Institute of Technology and Science (KITS) is a self-financing Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur. The Institute follows the curriculum designed by respective Board of Studies (BoS) of RTMNU. The teaching schedules with tentative dates are prepared for

effective delivery of respective course contents. The academic calendar circulated by RTMNU is strictly followed. With the introduction of Credit Based System (CBS) pattern for undergraduate programs and Choice Based Credit System (CBCS) pattern for post graduate programs from academic year 2012-13 and 2016-17 respectively, new courses were adopted by the Institute. The Institute conducts 'Add-on programs' such as CodeTantra (JAVA, C++), Spoken Tutorial Program, Co-cubes etc. The Institute also conducts industrial visits, site visits, various technical events and student training programs on regular basis. The Institute addresses gender issues by offering co-education where boys and girls are encouraged to work together in various curricular activities. The academic progress of each student is monitored by counselors by keeping records of student progress in academic, co-curricular and extra-curricular activities. The Institute also has a formal mechanism to obtain feedback from stakeholders like students, alumni, parents and corrective measures are taken based upon them. Class teachers and academic coordinators look after the regular academic activities and maintain the records of students. Faculty are involved in various bodies of university such as BoS and Academic Council. They also take part in syllabus reframing workshops and communicate the curriculum related gaps to the BoS members.

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

The student's admission is in accordance with Directorate of Technical Education (DTE), Mumbai, Maharashtra. The students are admitted through Centralized Admission Process (CAP) of DTE. The Institute has well qualified faculty and always tries to achieve excellence in teaching learning by introducing new methods to enhance the academic results and employability of the students. The faculty members prepare their teaching schedule to improve the quality of teaching-learning based on curriculum prescribed by the University. Faculty are encouraged to use the ICT based teaching apart from regular chalk and talk delivery. The Institute motivates the scientific temper, critical thinking and creativity of students by organizing workshops, seminars, and technical events like "TECHNODEON", etc. The Institute has established Internal Quality Assurance Cell (IQAC) to monitor the quality of teaching-learning process. The Institute encourages the faculty by giving study leave, financial assistance for attending Short Term Training Programs (STTP) and conferences. Senior faculty members are called as a resource person to conduct the workshops and expert talk in reputed institutions. The implementation of teaching schedule and student attendance is regularly monitored by respective class in-charge, academic coordinator and Head of department. All the departments ensure 100% coverage of syllabus at the end of semester. Remedial classes are also arranged for slow learners. Regular class tests, two sessional examinations, practical examinations are conducted for enhancing the student results at University examinations.

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

A strong and vibrant research environment will enable institutions to deliver relevant and quality content with excellence. Civil Engineering department has received a grant of Rs. 43.596 Lakhs from Board of Research in Nuclear Science, Department of Atomic Energy, BARC, Mumbai. Electronics Engineering department has eYantra Lab Setup Initiative (eLSI) in association with IIT Bombay funded by MHRD under NMEICT. The faculty strives for research paper publications in peer reviewed journals. Many research papers have been published by the faculty and students in reputed national, international journals and conferences during the last five years. The Institute awards the cash incentives to the faculty publishing research papers. Some faculty members are recognized as PhD supervisors. The Institute also supports research projects by providing the financial assistance to the students as per the requirement of their project work wherever necessary. The Institute has MoUs with industries and other agencies for promoting training, research and extension activities

in technical education.

The Institute encourages and supports the students to participate in events conducted by various Institutes in India. Institute also organizes activities through departmental clubs and associations. The NSS and NCC units are involved in many extension activities such as blood donation camps, annual special camps in the rural areas, tree plantations, road safety campaigns, street plays etc. for sensitizing the students about social issues. All the students and staff have actively and voluntarily participated in 'Swatchh Bharat Abhiyan' in the near by areas of the Ramtek.

### **Infrastructure and Learning Resources**

The basic infrastructure required for teaching–learning is available in all departments as per AICTE norms. It includes 41 class rooms, 65 laboratories, four seminar halls, one auditorium and eight departmental libraries. Some of the class rooms are equipped with LCD projectors. Around 27 CCTVs have been implanted at identified locations of the buildings in the campus. Sports facilities such as cricket ground, playground, volleyball ground and an indoor sports complex with gymnasium are available. Separate budgets are allocated for maintenance of campus infrastructure and all departments. The premises also include a bank with ATM, post office, departmental store and canteen. The Institute has two boys' hostels and two girls' hostels with mess facility. To keep the campus, classrooms and other areas of the campus clean and tidy, adequate housekeeping provisions are made.

The automated digital library has a wide collection of more than 63,000 valuable reference books, hand books and subscription of e-Journals. Audiovisual library with multimedia facility is available. The photocopy centre having spiral binding and lamination facilities are also provided. All the departments of the Institute have adequate computing facility both in terms of hardware and software. The whole academic campus is enabled with Wi-Fi facility with 48 Mbps dedicated Internet leased line.

### **Student Support and Progression**

The Institute facilitates scholarships and free-ship to students of reserved category and students from economical weaker sections of the society respectively as per the norms of the government. Every department of the Institute arranges expert lectures for students by industrialists and experienced professionals to bridge the gap between industry and academia. Soft skills development, career planning prospect and GATE coaching classes are incorporated in the timetable to motivate students to face competitive examinations and also to pursue higher studies. The Institute has a centralized training and placement cell to make the students employable and also help them to choose their career. The students bring laurels to the Institution every year by winning in various events of sports and cultural activities. The students' personal and academic grievances are taken care by the counselors, class teachers and higher authorities, if needed. The grievance cell addresses the issues related to ragging, gender, sexual harassment etc. The Institute has a student council comprising of class representatives from each department which looks after the various co-curricular and extracurricular activities. These representatives select 'student representative' who acts as a representative of all the students. Students are encouraged to participate in various University, State and National level events in cultural, sports and technical activities. The Institute organizes 'TEKNODEON' a mega technical event during which all the inter-college competitions of technical events are organized. The Institute also has an Alumni Charter which contributes actively for the growth of the Institution.

## **Governance, Leadership and Management**

The Institute vision is “To develop the Institute into a center of excellence in professional and technical education” and to achieve this, the mission has been articulated. The management provides financial support to fulfill the mission and assures quality service to its stake holders and in turn to the society. The Governing Body gives general guidelines for framing policies of the Institute in tune with the vision. The management involves the faculty in participative decision-making process. The management recognizes the need for decentralization, for the Institute growth. The Principal, Deans and HOD’s have adequate autonomy in academic and administrative decision making. The staff, student representatives and other stakeholders participate in framing policies and decision making at the levels of department and the Institute. The Institute considers the feedback of all relevant stakeholders and deploys them in transparent and effective manner. The Institute provides welfare schemes viz. Group Insurance, Provident Fund, Gratuity and KITS Employee Welfare Fund (KEWF) for the staff. The KEWF gives financial assistance to all needy employees. The Institute also provides concession in tuition fee for staff wards. Monetary funds are provided to staff attending conference, workshops refresher courses and STTPs. Cash incentives are given to faculty who publish research papers and books. The Institute has implemented IQAC to ensure quality in teaching-learning process. Annual performance appraisal of each faculty is done by the management regularly.

## **Institutional Values and Best Practices**

The Institute adopts environment friendly practices and takes necessary steps towards energy conservation, rain water harvesting, waste management, sewage water recycling and use of solar energy. Initiatives are taken by the faculty and students through various projects and activities to keep the campus eco-friendly. The charm of the campus is its lush green surroundings and extreme care is taken to maintain the existing flora. The structure of buildings to acquire maximum possible sun light and ventilation are few of the aspects promoted at our campus. Solar water heating systems are installed at student hostels and staff quarters.

Some of the best practices followed by the Institute are monitoring student through counseling and providing books through institutional book bank scheme to economically weak students of all categories. Other important practices that need to be mentioned are encouraging student internship at industry during vacation, inviting industry people for expert guest lectures, conducting special classes for academically slow learners and lateral entry students. Introduction of NSS, NCC and various clubs and associations for developing the confidence of the students. The overall results have improved over the years as a result of these activities. The Institute strongly believes that the institution has the responsibility of not only imparting education but also groom the overall personality of students in all respects. Hence, the Institute plays a major role in developing human values and inculcating ethical behavior in students, thus helping to build a better society.

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	KAVIKULGURU INSTITUTE OF TECHNOLOGY AND SCIENCE, RAMTEK
Address	K. K. Nagar, Mouda Road, Ramtek, Dist. Nagpur
City	Ramtek
State	Maharashtra
Pin	441106
Website	<a href="http://www.kits.edu">www.kits.edu</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	B. Ram Rathan Lal	07114-255309	9975413330	07114-25523 6	principal@kits.edu
Associate Professor	P. M. Pokley	7114-255309	9890475371	7114-255236	registrar@kits.edu

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	19-09-1985

**University to which the college is affiliated/ or which governs the college (if it is a constituent college)**

State	University name	Document
Maharashtra	The Rashtrasant Tukadoji Maharaj Nagpur University	<a href="#">View Document</a>

**Details of UGC recognition**

Under Section	Date	View Document
2f of UGC		
12B of UGC		

**Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)**

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	10-04-2017	12	Continuous Extension Approval
COA	<a href="#">View Document</a>	24-05-2017	12	Continuous Extension Approval

**Details of autonomy**

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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**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



<b>Location and Area of Campus</b>				
<b>Campus Type</b>	<b>Address</b>	<b>Location*</b>	<b>Campus Area in Acres</b>	<b>Built up Area in sq.mts.</b>
Main campus area	K. K. Nagar, Mouda Road, Ramtek, Dist. Nagpur	Rural	48.96	42625

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BE,Civil Engineering	48	HSSC	English	60	50
UG	BE,Electronics Engineering	48	HSSC	English	60	19
UG	BE,Mechanical Engineering	48	HSSC	English	120	96
UG	BE,Electronics And Communication Engineering	48	HSSC	English	60	25
UG	BE,Computer Technology	48	HSSC	English	120	96
UG	BE,Information Technology	48	HSSC	English	60	35
UG	BE,Electrical Engineering	48	HSSC	English	60	48
UG	BArch,Bachelor Of Architecture	60	HSSC	English	40	29
PG	Mtech,Civil Engineering	24	BE B.TECH.	English	18	0
PG	Mtech,Electr	24	BE B.TECH.	English	18	0

	onics Engineering					
PG	Mtech,Mechanical Engineering	24	BE B.TECH.	English	18	0
PG	Mtech,Computer Technology	24	BE B.TECH.	English	18	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	60	MTECH	English	10	4
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	60	MTECH	English	10	0

**Position Details of Faculty & Staff in the College**

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	15				39				122			
Recruited	5	0	0	5	9	2	0	11	58	24	0	82
Yet to Recruit	10				28				40			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				52			
Recruited	0	0	0	0	0	0	0	0	30	22	0	52
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				89
Recruited	83	6	0	89
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				37
Recruited	34	3	0	37
Yet to Recruit				0

### Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	5	0	0	5	0	0	7	1	0	18
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	4	2	0	51	23	0	80

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	1	0	1
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	24	21	0	45

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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

<b>Details of Visting/Guest Faculties</b>				
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
		6	0	0

**Provide the Following Details of Students Enrolled in the College During the Current Academic Year**

<b>Programme</b>		<b>From the State Where College is Located</b>	<b>From Other States of India</b>	<b>NRI Students</b>	<b>Foreign Students</b>	<b>Total</b>
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	1	0	0	0	1
	Others	0	0	0	0	0
UG	Male	1150	96	0	0	1246
	Female	794	42	0	0	836
	Others	0	0	0	0	0
PG	Male	2	0	0	0	2
	Female	1	0	0	0	1
	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	38	58	59	66
	Female	40	40	46	47
	Others	0	0	0	0
ST	Male	6	9	6	14
	Female	5	4	6	4
	Others	0	0	0	0
OBC	Male	137	123	145	132
	Female	76	69	98	111
	Others	0	0	0	0
General	Male	51	118	92	112
	Female	35	61	56	72
	Others	0	0	0	0
Others	Male	34	39	26	36
	Female	27	22	20	22
	Others	0	0	0	0
Total		449	543	554	616

### 3. Extended Profile

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#### 3.1 Program

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

Response: 536

Number of self-financed Programs offered by college

Response: 14

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

Response: 3

#### 3.2 Students

Number of students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2194	2333	2682	2923	2591

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
363	364	406	432	423

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

2016-17	2015-16	2014-15	2013-14	2012-13
583	602	746	629	554

Total number of outgoing / final year students

Response: 3114

#### 3.3 Teachers

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

2016-17	2015-16	2014-15	2013-14	2012-13
152	164	159	149	149

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

2016-17	2015-16	2014-15	2013-14	2012-13
145	154	148	141	142

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

2016-17	2015-16	2014-15	2013-14	2012-13
176	179	172	169	169

**Total experience of full-time teachers****Response: 1505****Number of teachers recognized as guides during the last five years****Response: 07****Number of full time teachers worked in the institution during the last 5 years****Response: 730****3.4 Institution****Total number of classrooms and seminar halls****Response: 45****Total Expenditure excluding salary year-wise during the last five years ( INR in Lakhs)**

2016-17	2015-16	2014-15	2013-14	2012-13
370.11	470.83	448.35	401.86	375.02



**Number of computers**

**Response: 594**

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

**Response: 0.48537**

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

**Response: 0.07168**

NAAC

## 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 Institute has well defined system for planning and effective implementation of the curriculum. The Institute being affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur adheres to the curriculum prescribed by the University. The Institute systematically designs and develops action plan for delivery and effective implementation of the curriculum. The Institute strictly follows the academic calendar issued by the RTMNU for planning academic activities. The Principal conducts meeting with the Deans and Head of Departments (HODs) prior to starting of every academic year for evolving the strategies of planning and effective implementation of the curriculum. The academic schedule is planned well in advance and is disseminated among students, faculty members and departments. It is also uploaded on the Institute's website.

The faculty members from all departments develop action plans in the form of teaching schedule for their allotted subjects. Every faculty member prepares a subject note file and a subject file which contains syllabus of the subject, teaching scheme, teaching schedule with tentative dates of topic delivery, University examination question papers, list of text and reference books.

An orientation program is conducted for first year students on the first day of college in order to make them acquainted with the system of the Institute. In the orientation, the students are given information about the programs, the examination system, the evaluation system and the way course would be taught. The curriculum is delivered through theory and practical sessions and is monitored by the class teacher, academic coordinator and Head of the respective departments. Faculty members are encouraged to adhere to the teaching schedule and teach through innovative teaching methods such as presentations, assignments, discussions, workshops and seminars. Apart from regular lectures, special classes are conducted for students taking admission directly to second year (Diploma) to cover the curriculum so as to compensate for the classes missed because of their late admission.

The academic performance of the students is evaluated on continuous basis by conducting two mid examinations in each semester. The performance is also judged through class tests, surprise tests and assignments. For diploma students a separate mid examination is conducted to evaluate the performance. Based upon performance of the students in all tests, academically weak students are identified and remedial classes are conducted for such slow learners. Academic performance in mid examinations and attendance reports of the students are generated and are communicated to the parents of all students. The parents are invited to meet the respective HOD's and faculty members to discuss the performance of their wards. Faculty members also take feedback from the students through counseling on various issues like syllabus coverage, their opinion on curriculum delivery and difficulties faced. The feedback so obtained is analyzed and corrective measures are taken for effective implementation of teaching and learning process. The HOD's conduct meeting frequently with academic coordinator to assess the syllabus coverage. The Principal have regular meetings with HOD's to assess the syllabus

converge to reframe the academic calendar if required.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:** 42

#### 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
17	11	04	01	09

File Description	Document
Details of the certificate/Diploma programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 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:** 167.12

#### 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
56	54	60	47	27

File Description	Document
Details of participation of teachers in various bodies	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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:** 32.46

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

Response: 174

File Description	Document
Details of the new courses introduced	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 28.57

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

Response: 04

File Description	Document
Name of the programs in which CBCS is implemented	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 32.68

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

2016-17	2015-16	2014-15	2013-14	2012-13
1371	961	500	540	586

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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:

#### Issues related to Gender:

The Institute addresses cross cutting issues relevant to gender. Boys and girls are encouraged to work together in various curricular (laboratory, classes and group project work), co-curricular and extra-curricular activities. No discrimination is made between boys and girls while forming committees of associations and clubs.

In all organising committees and institutional related works duties and responsibilities are assigned to staff members without any gender bias. The Institute has a committee to address the issues of women safety at work place. This committee also addresses the issues related to sexual harassment and gender violation .

#### Issues relevant to Environment and Sustainability, Human Values and Professional Ethics:

Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur prescribes various compulsory courses in the curriculum of various semesters which address issues relevant to Environment and Sustainability, Human Values and Professional Ethics. Various courses of curriculum and the relevant issues are indicated in the following table:

Course	Semester	Relevant Issue
Ethical Sciences	First year(First Semester)	Human Values
Environment Studies	Third / Fourth Semester (All Branches)	Environment and Sustainability
Social and Ethical aspects of IT	Third Semester (Computer Technology)	Professional Ethics
Ethics in Information Technology	Third Semester (Information Technology)	Professional Ethics

The Ethical Sciences sensitizes the students about the importance of human values in day to day life. The subject helps the students to understand self realization, human values and accept social responsibility through the course study. They learn about the aspects of social life through topics like social engineering which helps them to understand the importance of engineering in building of human values. They also learn about the scope and application of psychology and sociology to the real life problems.

Apart from that, they learn the role of democracy in the industrial scenario. Moreover, they learn about

professional ethics and also develop awareness on socio-legal issues such as Public Interest Litigation (PIL), Right to Information (RTI), Intellectual Property Right (IPR) and patents. The course also teaches the students about industrial life through societal perspective.

The course on Environment Studies addresses the issue on Environment and Sustainability. Students are taught the objectives and guiding principles of environment that are being used for public awareness and organization of environmental education system. The students are also educated regarding the optimal use of natural resources and equitable resources for sustainable life style that are required to monitor the pollution, human health, woman and child welfare and other social issues.

Students are educated to identify and analyze ethical and social issues associated with information technology through the courses related to Information Technology (IT). Students understand and interpret the professional code of ethics which are relevant to the IT profession. Students can take appropriate action based on standards of professional ethics when confronted with an ethical situation. In addition to above courses, students are made aware of professional ethics of a professional Institute through 'Code of conduct for students' of the Institute. It is included in prospectus and also uploaded on Institute's website. The administrative manual prescribes the professional ethics to be followed for staff members.

File Description	Document
Any Additional Information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:** 7

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

**Response:** 07

File Description	Document
Details of the value-added courses imparting transferable and life skills	<a href="#">View Document</a>
Brochure or any other document relating to value added courses.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 26.34

## 1.3.3.1 Number of students undertaking field projects or internships

Response: 578

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.4 Feedback System

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

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: A. Any 4 of the above

File Description	Document
Any additional information	<a href="#">View Document</a>

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

File Description	Document
URL for feedback report	<a href="#">View Document</a>

## 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:** 9.79

##### 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
141	217	262	299	342

File Description	Document
List of students (other states and countries)	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 85.02

##### 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
449	543	554	616	654

##### 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
652	682	672	654	654

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

#### 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:** 100

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
363	364	406	432	423

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**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:**

In order to assess the needs of students in terms of academics the Institute implements the following

- An orientation lecture is arranged for first year students before commencement of class work. The Principal addresses the students about the practices, the rules and regulations followed in the Institute. Detail information is given about the curriculum, examination pattern and various activities followed in the Institute.
- In the first year, students with low qualifying score at entry level are given additional inputs in courses like Mathematics, Communication skill etc. to bring them at par with the students from urban areas or from boards like CBSC/ICSE having more advance curriculum.
- Additional classes are engaged for diploma students (direct second year admission) to cope up the gap due to late admissions.
- Students who perform very much better than the class average are considered as an advanced learner.

The Institute identifies learning needs of advanced learners and respond in following ways

- The Institute encourages advanced learners for undergoing internships in Industry. These students are exposed to various intercollegiate technical competitions to sharpen their skills and motivate them to win awards.
- Advanced learners are given opportunity to prepare for training and value added certificate programs.
- Challenging projects are given to the advanced learners to enrich their knowledge.

- Advanced learners are motivated to achieve high performance in their academics by giving cash prizes/awards to those who top in University examinations during the annual prize distribution ceremony.

Students who perform the below the class averages are termed as slow learners, support is provided to slow learners as mentioned below

- Special remedial classes are arranged subjectwise.
- Organising expert lectures/guest lectures.
- Mentoring sessions for confidence building amongst them.
- Organising co-curricular activities like competitions and quizzes for supplementing the knowledge of the students.
- Extra coaching is provided prior to examination.
- E-learning material is made available.
- Assignments are given and class test are conducted regularly.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

### 2.2.2 Student - Full time teacher ratio

**Response:** 15.13

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 2.2.3 Percentage of differently abled students (Divyangjan) on rolls

**Response:** 0.05

#### 2.2.3.1 Number of differently abled students on rolls

**Response:** 01

File Description	Document
List of students(differently abled)	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any other document submitted by the Institution to a Government agency giving this information	<a href="#">View Document</a>

## 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:

To enhance the learning experience of student the following student centric methods are adopted

- Soft Skill Development (SSD) and Career Prospects and Planning (CPP) are incorporated in time table of third and final year students apart from curriculum.
- Students are encouraged for industrial training to get acquainted to industrial work culture.
- Industrial visits are arranged to recognize the practical and theory application of various engineering concepts and understand the practical and theory relationships.
- Case studies related to industrial problems are given to group of students for solutions.
- Mini projects are given to learn and implementation of theoretical knowledge into the practical application.
- Various needs of local peoples are identified and remedies are given through the final year projects.
- Laboratory sessions are conducted regularly to sharpen the practical knowledge.
- Every department is having departmental forums/associations for conducting co-curricular activities.
- Participation and active involvement of students in many committees, clubs and associations.
- Various clubs and associations conduct paper presentation, poster presentations, and quiz competitions for all the students.
- National level technical fest such as 'TEKNODEON' is arranged for the students to develop creativity and skills among them.
- Monitoring the students to enroll in extension activities through NSS and NCC to develop social responsibilities amongst them.
- Helping hand forum is working for helping old aged home people and deaf and dumb students through various activities regularly.
- Literary club of the Institute arranges events like public speaking, debates, word power to enhance communication skills and vocabulary of students in english.
- Special training through Campus Recruitment Training (CRT), Co-cubes and training by carrier path solutions is given to enhance the employability of the students.

File Description	Document
Any additional information	<a href="#">View Document</a>

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

**Response:** 75.86

#### 2.3.2.1 Number of teachers using ICT

Response: 110

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

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

**Response:** 15.13

#### 2.3.3.1 Number of mentors

Response: 145

File Description	Document
Year wise list of number of students, full time teachers and students to mentor ratio	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 2.3.4 Innovation and creativity in teaching-learning

**Response:**

All the faculty members are encouraged to adopt innovative teaching methods so as to ensure effective learning outcomes.

The following innovative ways are adopted for effective and better understanding

- Models are used for explaining the concepts in classroom.
- Dialogues are encouraged instead of monologue for better interaction in theory as well as laboratory sessions.
- Group discussions and quizzes are regularly conducted in classroom.
- Expert lectures are organised by persons/experts from Industry and academia.
- Workshops and seminars are organised for the students and faculty members.

- Project exhibitions are arranged to display their technical knowledge and creativity.
- Industrial visits and study tours are arranged every year for the students and faculty members for exposure to practical challenges faced by the industry and to know the advanced technologies used by them. It also increases awareness about expectations of industry and helps them to prepare for employability.
- Faculty members are encourage to attend short term training programme (STTP), faculty development programmes (FDP).
- Faculty members are also promoted to present/ publish research papers in conference/journals.
- Students are asked to select a topic from syllabus, prepare and present it in seminar form in the class.
- Role play is practiced in the class room to understand various concepts and principles of subjects in the class. Students participate in the activities and also understand concept in simple way.

File Description	Document
Any additional information	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years	
<b>Response:</b> 84.38	
File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	<a href="#">View Document</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years				
<b>Response:</b> 10.7				
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
20	14	15	16	13

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 2.4.3 Teaching experience per full time teacher in number of years

**Response:** 10.38

File Description	Document
List of Teachers including their PAN, designation,dept and experience details	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 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:** 4.79

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
03	01	01	01	01

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
e-copies of award letters (scanned or soft copy)	<a href="#">View Document</a>

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

**Response:** 16.72

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
29	35	33	30	18

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

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

#### Response:

- The internal examination component provides much scope for ensuring overall development of students.
- An academic schedule is prepared in the starting of every year which comprises of tentative dates for two mid sessional examinations, internal practical examinations, external practical examinations and University examinations.
- First mid sessional question paper is set based on three units whereas second mid sessional question paper is set on remaining three units.
- Question papers in sessional examination are set as per University examination pattern.
- Practical evaluation is done weekly and grades are assigned to each student based on performance analysis and viva-voce.
- The performances of students in mid sessional examination are informed to parents via post and Short Message Services (SMS).
- Class room attendance is being monitored regularly by class teachers, academic coordinator and HOD's.
- Sessional marks are awarded to the students based on performance in first and second mid sessional examinations, assignments and class attendance.
- In each department, final year projects are evaluated continuously. Students maintain project diary to record their project progress. These diaries are checked by project supervisor and project evaluation committee on a regular basis.
- Reform in evaluation process is done by Internal Quality Assurance Cell (IQAC).
- Rules and regulations laid down by the University for regular examinations to be conducted for students in undergraduate as well as post graduate programs are strictly followed by the Institute.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:**

For smooth conduction of examinations, the Institute has established separate examination section and a Dean (Examination) is looking after all examinations related work.

- In the beginning of an academic year, the academic schedule is displayed in the Institute website. The information is also displayed on the student's notice board and communicated to departments. The internal assessment is done through assignments, mid sessional examinations, practical records and viva voce. After completion of each unit, assignments are given to the students. Students are asked to submit assignments within stipulated time.
- Evaluation of answer sheets are done and the solutions are discussed in class rooms. The answer sheets are shown to the respective students and in case of any discrepancies, concern faculty resolves it.
- Practical evaluation is done by performing experiments, analysis and results obtained. After every practical session, practical records are corrected by concerned faculty member. Viva questions are given to the student for better understanding of experiment. Internal practical assessment is done based on practical performance, written test and vice-voce.
- Final year projects are to be carried out as a part of curriculum and the evaluation of the projects is done on regular basis. Students are required to give presentation before the evaluation committee and they have to incorporate the suggestions given by committee for improvement. The marks are awarded on the basis of their presentation, performance and progress of project.
- Industrial case studies are evaluated based on reports submitted by the students after completing case study and presentations before evaluation committee.
- A group of four-five students are formed and asked to perform a mini project of their choice. These projects are displayed in the departments and evaluation committee awards the grades on basis of their technical knowledge and creativity.

File Description	Document
Any additional information	<a href="#">View Document</a>

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

**Response:**

The mechanisms to deal with examination related grievances with reference to Institute level and University level are as follows

**Institute level:**

- At the beginning of every semester the methods of assessment are explained to the students.
- Answer sheets of mid sessional examinations are corrected within three days of examination.
- Answers of mid sessional question papers are discussed in the classroom. The answer sheets are shown and discussed in the respective classes so that the mistakes/errors of the students can be shown and rectified.



- Any grievances related to assessed answer books are resolved by respective faculty members.
- Students can also approach the Head of the department, in case of any grievances.

### University level:

Paper setting, conduction of examination, evaluation and declaration of results is done by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

- After the declaration of University results, students can apply for reassessment in which they request for photo copy of their answer books from the University.
- If the students have grievances after receiving photo copy of answer book, they can apply for reassessment.
- Reassessment result is declared by University in due course of time.
- Examination section attends to the grievances of the students related to University examination.
- The Institute takes special care in dealing such issues.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

#### Response:

Every year, the Institute come up with an academic schedule which is for effective and smooth running of the Institute. Different committees are formed at the beginning of the session which includes: academic committee, admission committee, examination committee and grievance committee. These committees look after the activities and plans throughout the academic session.

#### Academic Schedule:

- The University provides academic calendar for both odd and even semester in the beginning of every academic year. Based upon the University academic calendar the academic schedule of the Institute is prepared.
- The academic schedule includes:
  - The dates of first and second mid sessional examination.
  - The schedule for internal and external practical examinations for all semesters.
- The subject teachers submit teaching schedule of the concerned subjects in the respective departments.

#### Teaching Schedule and Implementation:

Each department plans for the completion of the syllabus in every academic session in the following sequence

- Departmental meetings are held to calculate teaching workload.
- Teaching schedule include unit-wise distribution of lectures along with proposed and actual dates, list of recommended text-books.
- The Teaching schedules are submitted to the Head of the departments.
- Each faculty plans semester-wise, student-centric teaching methods, group discussion and quiz competitions etc. for effective teaching and learning.
- A review meeting is held by the HODs at the end of every month to monitor the implementation of teaching schedule.
- Extra classes are conducted if required to complete the syllabus. Assignments are given to the students, which are assessed periodically.
- Efforts are made to resolve difficulties in subjects and if necessary, expert lectures are conducted to motivate the students.
- At the end of every month, faculty members submit the 'Log Report' (monthly activity report) indicating number of classes, practical sessions, number of students attending counseling sessions, class test, assignments, departmental and institutional responsibilities carried out.

#### Evaluation Schedule:

- The tentative schedule dates of mid sessional examination and University examinations are notified in the beginning of every academic year.
- The mid sessional examination marks of students are displayed on notice board of respective departments.
- At the end of the session list of students having less than 75% attendance is displayed on respective department notice board.
- The internal assessment marks are allotted on the basis of performance in the mid sessional examinations, percentage of attendance and submission of assignments.
- The performance of the student is discussed in respective classes and due care is taken for slow learners.
- The internal assessment marks are shown to the students and submitted online to the University before final examinations.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

## 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:

- Each programme of the Institute clearly states the learning outcomes in terms of program outcomes (POs) and course outcomes (COs). The POs define the abilities of the students of that program

expected at the time of graduation and COs are the learning outcomes that the students learned at the end of each course.

- The Institute has brought paradigm shift in its approach by focusing on learning rather than teaching. Learner centric initiatives have ensured that all the academic processes are drafted and implemented with certain learning outcomes in mind. For this purpose, Institute has adopted outcome based education system. As an example, program outcomes of department of Information Technology are listed below:

The POs are made available to all stakeholders by following means

- POs are published on the website of the institute and are displayed at prominent places in each department.
- These are disseminated to the stakeholders through interactions such as, student-class teacher meetings, parent meetings etc.
- The faculty explains the program outcomes in the beginning and course outcomes expected from the courses offered to the students before the commencement of every semester.

File Description	Document
COs for all courses (exemplars from Glossary)	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

#### Response:

The assessment tools and processes used for measuring the attainment of each of the program outcomes and program specific outcome are as mentioned below:

#### Method of Assessment of POs/PSOs

The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are assessed with the help of course outcomes of the relevant courses through direct and indirect methods.

Direct methods are provided through direct examinations or observations of student knowledge or skills against measurable course outcomes.

The knowledge and skills described by the course outcomes are mapped to specific problems on University examination, internal exams and assignments. Throughout the semester the faculty records the performance of each student on each course outcome.

**Average attainment in direct method = University examination (80%) + internal assessment (20%)**

Indirect assessment strategies are implemented through the feedbacks from students, parent and alumni.

The tools used for the assessment of POs/PSOs and their frequencies are as mentioned below:

Sr. No.	Assessment Tool	Description	Mode	Frequency
1	University Examinations	At the end of each semester University conducts the examinations. After University results the course outcomes are measured based on course attainment level fixed by the program.	Direct	End of each semester
2	Mid sessional Examinations	Two internal mid sessional examinations are conducted per semester to ensure that students have achieved the desired level of competencies at unit level and whether corresponding COs are achieved or not. According to the performance of the student mapping is carried out with the respective COs for assessing the attainment level of specific COs of the course.	Direct	Twice per semester
3	Assignment	Assignments are given at the end of each unit. According to the performance of the students in answering each question mapping is carried out with the respective COs.	Direct	End of each unit
4	Alumini feedback	Alumini feedback is an important tool to find out level of relevance of the curriculum with the expected skills of the industries. After receiving the response, the answer to the specific question are assessed and mapped with the corresponding POs to find level of attainment	Indirect	Once in a year
5	Student feedback	The objective of conducting the survey is to understand the strength and weakness of various value added courses, pre-placement training imparted.	Indirect	Once in a year

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

### 2.6.3 Average pass percentage of Students

<b>Response:</b> 89.76	
2.6.3.1 Total number of final year students who passed the examination conducted by Institution. Response: 2795	
2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution Response: 3114	
<b>File Description</b>	<b>Document</b>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

<b>2.7.1 Online student satisfaction survey regarding teaching learning process</b> <b>Response:</b> 2.82	
<b>File Description</b>	<b>Document</b>
Database of all currently enrolled students	<a href="#">View Document</a>

## 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:** 55.59

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
43.59	0	0	0	12

File Description	Document
List of project and grant details	<a href="#">View Document</a>
e-copies of the grant award letters for research projects sponsored by non-government	<a href="#">View Document</a>

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

**Response:** 4.83

3.1.2.1 Number of teachers recognised as research guides

Response: 07

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 0.03

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

Response: 04

File Description	Document
Supporting document from Funding Agency	<a href="#">View Document</a>
List of research projects and funding details	<a href="#">View Document</a>

## 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:

To facilitate the knowledge transfer for the progress of the students, Institute has established following ecosystem for innovations.

#### 1. Rain Water Harvesting

To maintain the ground water level of the region, the Institute does rain water harvesting. Each harvesting system possesses different capacity of storage of water and which could be reused as and when required. Since the Institute is a residential campus, the residents are much dependent on the harvested water during summer season.

#### 2. Eco-friendly green campus

The Institute is pollution free due to sprawling lawns with greenery and trees on the campus. The lawns and greenery are maintained by the project engineering section of the Institute with the help of professional people for cutting and growing the lawns and trees in a most beautiful way. The ambience suits for both the teaching as well as learning.

#### 3. R. O. Plant for drinking water

As the ground water is not preferable for drinking purposes due to its high level of hardness, the Institute has started the R.O. plant with the capacity 700 ltr/hr for the purification of ground water. The plant supplies the pure water to all departments, staff quarters, hostels and canteen for the drinking purposes.

#### 4. Solar energy

Solar water heater panels are installed over the boy's and girl's hostels. The solar energy is conserved in the form of heating the water and hot water is supplied to the different parts of the hostel. By this process a large amount of electricity is saved. Hostellers are benefited by this plant.

#### 5. KITS- ISRO project

The Department of Electronics Engineering of Institute has mutual collaboration with Regional Remote Sensing Centre (RRSC), Nagpur to carry out the projects regarding the development of software on reflection conversion method in hyper spectral remote sensing.

## 6. Biogas Plant

The biogas plant has been developed by the Department of Mechanical Engineering, which is situated near Triveni mess of Institute. The biogas is generated from the garbage waste material and other bio-waste materials. With the help of this, the Institute is conserving Liquid Petroleum Gas.

## 7. E-Yantra Lab Setup Initiative (eLSI)

The Department of Electronics Engineering has initiated the e-yantra project which was funded under MHRD for facilitating the robotics lab with the aim of spreading embedded system and robotics education for students. These projects also conduct and provide training to teachers and students on different experiments through 'Task Based Training' (TBT).

## 8. Incubation Centre

The Institute has established an incubation centre for the students to develop the different innovative engineering products and their usage in the interest of the local community.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:** 67

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
13	23	18	08	05

File Description	Document
List of workshops/seminars during the last 5 years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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:** No

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 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	<a href="#">View Document</a>
e- copies of the letters of awards	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 0.57

#### 3.3.3.1 How many Ph.Ds awarded within last five years

Response: 04

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 0.36

#### 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
14	14	04	07	14

File Description	Document
List of research papers by title, author, department, name and year of publication	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 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:** 1.08

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
21	22	38	30	46

File Description	Document
List books and chapters in edited volumes / books published	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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 Institute makes the best possible efforts to bring about social and economic transformation of neighborhood community, so as to promote overall development and well being of society. The Institute inculcates desirable sensitivity, empathy and the virtue of social participation among all its stake holders. Institute is well aware of its social responsibility and hence it renders community service, especially to marginalized sections. It perceives formal education as an instrument of bringing about positive social transformation which leads to the betterment of social culture and spiritual fabric of human community. The Institute is committed to develop balanced personality of learners who can facilitate the forces of social, economic and environmental growth.

The endeavor of the Institute is to create engineers with strong domain knowledge. The students are sensitized towards humanity so that they understand the problems of society and find out the solutions of issues like poverty, alcoholism, unemployment, female feticide etc. The students try to solve the local problems of communities through various activities of the departmental forums, associations, National

Service Scheme (NSS) and National Cadet Core (NCC) units. In an attempt to reach the society, various departments of the the Institute organize social, cultural and spiritual activities. Students are motivated to contribute to various social causes. To create awareness about digital India, staff and students of various forums regularly visit the nearby schools and give seminars on the importance of making India digital.

**To inculcate the social values and holistic development of the students, the Institute has organized the following events/ programs during last five years:**

**Helping hands:** It is a unit of KITS students who serve the under-privileged and poor students in Ramtek taluka by providing cloths, books and other educational items at free of cost.

**National Service Scheme (NSS):** Every year NSS organizes different activities such as Swachh Bharat Abhiyan, free medical checkup, awareness programme on solar energy, rainwater harvesting, importance of agricultural and tree plantation drive at a different places of Ramtek taluka. The NSS also organizes drawing–painting competition at the deaf and dumb school of Ramtek.

During the national calamities such as Uttarakhand tragedy, Bhuj earthquake, Kargil wars etc., the NSS unit works hard to donate cash, clothes and food to the sufferers. Many other volunteer programs are conducted every year by the unit such as eradicating corruption, road safety, cleanliness activities and women empowerment. Expert lectures on anti ragging act, cyber law for the students were also organized by the NSS unit. Students of NSS regularly visit the old age home and distributes the necessary things to them.

**National Cadet Core (NCC):** The NCC unit extends its services to the society in the form of tree plantation, blood donation camp, Swachh Bharat Abhiyan and training technical students as NCC cadets in the interests of the nation.

File Description	Document
Any additional information	<a href="#">View Document</a>

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

**Response:** 10

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
04	03	03	00	00

File Description	Document
Number of awards for extension activities in last 5 years	<a href="#">View Document</a>
e-copy of the award letters	<a href="#">View Document</a>

### 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:** 65

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
06	20	15	12	12

File Description	Document
Reports of the event organized	<a href="#">View Document</a>
Number of extension and outreach programs conducted with industry,community etc for the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 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:** 56.41

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. year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
790	2100	1890	1070	1269

File Description	Document
Report of the event	<a href="#">View Document</a>
Average percentage of students participating in extension activities with Govt. or NGO etc.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.5 Collaboration

<p><b>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</b></p> <p><b>Response: 77</b></p>														
<p>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</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>16</td> <td>24</td> <td>16</td> <td>01</td> <td>20</td> </tr> </tbody> </table>					2016-17	2015-16	2014-15	2013-14	2012-13	16	24	16	01	20
2016-17	2015-16	2014-15	2013-14	2012-13										
16	24	16	01	20										
<p><b>File Description</b></p>		<p><b>Document</b></p>												
<p>Number of Collaborative activities for research, faculty etc.</p>		<p><a href="#">View Document</a></p>												
<p>Any additional information</p>		<p><a href="#">View Document</a></p>												

<p><b>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)</b></p> <p><b>Response: 12</b></p>														
<p>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)</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>04</td> <td>01</td> <td>03</td> <td>03</td> </tr> </tbody> </table>					2016-17	2015-16	2014-15	2013-14	2012-13	01	04	01	03	03
2016-17	2015-16	2014-15	2013-14	2012-13										
01	04	01	03	03										

<b>File Description</b>	<b>Document</b>
e-copies of the MoUs with institution/ industry/ corporate house	<a href="#">View Document</a>
Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years	<a href="#">View Document</a>

NAAC

## 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:**

The Institute has adequate infrastructure facilities available in the campus in order to maintain the quality of academic facility which includes classrooms, faculty rooms, laboratories, etc. complying with the standards necessitated by AICTE and RTMNU.

Normally the policy of the Institute infrastructure is conveyed and executed by a committee constituted by the Management/Governing council. The committee confirms a uniform and balanced distribution of space and resources to all departments. It also provides and maintains essential amenities to the faculty and students in a time bound manner.

The Institute has following infrastructural facilities for teaching-learning:

- The Institute is sprawled in an area of 48.96 acres of land and the total built up area of the building constructed is 42625 sq.mt.
- The Institute comprises of various buildings which accommodates different departments, the library and the gymnasium.
- The Institute consists of 41 class rooms, 65 laboratories including computer lab in each department, two research and development laboratories, a resource center, six drawing halls and 10 tutorial rooms.
- The Institute has 64 faculty rooms including nine HODs cabin, 10 departmental offices, a NCC office and a NSS office.
- Four air conditioned seminar/conference halls, out of which three halls are having 100 seating capacity and one is having 350 seating capacity.
- Air Cooled Central Library is enabled with audio visual facility.
- The campus also accommodates two girls hostels, two boys hostels, three messes which includes two air cooled messes for residential students and staff.
- The Institute has Chairman, Secretary residence and two guest houses for VIPs.
- Principal's residence and 40 staff quarters is made in the campus.
- Separate project engineer section is available for maintenance of infrastructure.
- A reverse osmosis plant is setup for providing pure drinking water for the students and staff.
- UCO bank along with ATM and a post office is also available in the campus.
- There are total 594 computers and most of the computers are connected through 48 Mbps leased line.
- CCTV Cameras have been installed in the campus for safety purpose.

**Infrastructure facility of the Institute**

Sr. No.	Details of the Facilities	Required number as per AICTE Norms	Available Number	Required area per facility as per AICTE norms (sq.mt.)	Total required area as per AICTE norms (sq.mt.)	Total available carpet area (sq.mt.)
1	Class Rooms	41	41	66	2706	3447.34
2	Laboratories	49	49	66	3234	4509.65
3	Computer Lab	15	15	66	990	1354.2
4	Central Computer Centre	1	1	150	150	248.1
5	Seminar Hall	4	4	132	528	887.25
6	Tutorial Rooms	10	10	33	330	482.8
7	Drawing Hall	6	6	132	792	831.10
8	Workshop	2	2	200	400	433
9	Library & reading room	1	1	400	400	1020
10	R&D lab	1	2	66	132	248.00
11	Construction Yard/MM	1	1	400	400	590

**Academic Support facility and Equipment**

Equipment	Number
LCD projectors	20
Computers	594
Printers	54
Photocopying machines	04
Scanner machine	12
Wi-Fi device access point	02
Wi-Fi router	13

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:**



- **Sports and Outdoor games facility:** A full-fledged sports complex has been constructed in the premises of the institution. The campus has a huge play ground of total area of 29,000 sq.mtr. for boys and girls students. For outdoor games and sports, the Institute has running track, cricket ground, football ground, volleyball court, basket ball court, tennis court, hand ball court, and kho-kho ground.
- **Indoor games facility and Gymnasium:** The Institute also has a full-fledged indoor sports complex having indoor games facilities such as table tennis, carom, chess, badminton and basket ball. The size of the Indoor complex is 1392 sq.mtr. A gymnasium of 20 sq.mtr. is well equipped with the fitness equipments such as treadmills, jogger machines, weight lifting plates, gym balls etc.

The details of the indoor and outdoor complex are given in the following table.

#### Details of Sports Complex and Gymnasium

Sr. No.	Facility	Area/Size (sq. mtr.)	Year of Establishment
1	Indoor complex	1392	1996-1997
2	Outdoor (play field)	27300.027	1987-1988
3	Gymnasium	20	1998-1999
4	Yoga center	50	2002-2003
5	Prayer room	49.20	1995-1996
6	Dispensary	25	1993-1994
7	NSS	10.57	1988-1989
8	NCC	11.75	1993-1994
9	Cultural Activity	66.15	1987-1988

- **Grants received:** The Institute had received a grant of Rs. 37,50,000/- from the Government of India (GOI), Union ministry of youth affairs and sports, New Delhi, for the construction of Indoor Complex in 1995. The Institute had also received grant of Rs. 3,00,000/- from the GOI for sports equipment in the year 1999. The Institute received a grant of Rs. 4,28,000/- from the GOI for play ground development (basket ball court, cricket pitch, volleyball court, clay tennis court) in year 2004.
- Students participate in various games in the inter-zonal competition of RTMNU. Every year the Institute conducts competition for various games and sports.
- The Institute provides sports kit and sports material to the students participating in interamural state/national level, zonal, inter-zonal, all India inter university tournament and other different types of game and sports.
- **Yoga centre:** The staff and students can avail the facility of yoga centre of size 50 sq.mtr. which is available in the Institute premises. This is used as a meditation centre by both staff and students.
- **Canteen:** The Institute has a canteen which accommodates around 80 students at a time for refreshment.
- **Cultural Activities :** The Institute has clubs/associations/forums which conduct various co-curricular and extra curricular activities . Apart from these clubs and forums, the Institute also has NSS and NCC units. For cultural activities, an open stage is constructed and sufficient arrangement

is made for the audience.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:** 15.56

##### 4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 7

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	<a href="#">View Document</a>
Link for additional information which is optional	<a href="#">View Document</a>

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

**Response:** 13.32

##### 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
47.4	47.4	50.7	60.15	65.4

File Description	Document
Details of budget allocation, excluding salary during the last five years	<a href="#">View Document</a>
Audited utilization statements	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

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

##### Response:

- The Institute library has been established since the inception of the Institute, year 1985. Separate building for the central library was constructed in year 1994. It has been named as P. V. Narsimha Rao Central Library. Which is built up in an area of 1620 sq.mtr. The central library is a two-floored building having maximum seating capacity of 250. The ground floor is divided into 11 sections: alter for goddess Saraswati, office for staff, photocopy section, circulation desk, new arrival section, searching section through Online Public Access Catalogue (OPAC) and CATLOGUE index, reading hall, reference section, teacher's table, news papers, magazines section and RO water etc.
- First floor is divided into 10 sections such as audio/video visual section, digital library, periodical section, project reports, bounded volumes, processing books and journals section, Book Bank Scheme (for SC/ST students), Institute Book Bank Scheme (for all students).
- The library is well equipped with more than 63,000 books, national and international journals, magazines, newsletters and newspapers.
- The Institute has a Library Advisory Committee with Principal as Chairman, Librarian as member secretary and faculty member from each department as members. Committee meets once in every year, prepares proposals, analyzes the feedback taken by the Librarian from the students and staff and submits the report to Institute authorities for necessary action.
- Some of the significant initiatives implemented by the committee are:
  - Wi-Fi facility, Institute Book Bank Scheme, books circulation with Integrated Library Management System software (SLIM21).
  - E-access to the library through OPAC.
  - Facility of one set of books of each semester to the University and Institute toppers at free of cost.
  - Coolers are provided during summer and RO water is provided within the library.
- The library has received a grant of Rs. 4.5 lakhs from AICTE under MODROBS for the project "Library Automation" in the year 2003.
- The central library, it is automated using SLIM21 since 2004.
- The staff and students can see their library account status and access library database through SLIM21 version 3.4 software and DELNET database anywhere in the campus through internet, as the Institute academic premises is Wi-Fi enabled and all departments are connected with local area network of bandwidth 48 Mbps.

The library has following modules of the SLIM 21 version 3.4 Software.

**Catalogue:** This allows preparing the database of books, journals, project reports and magazines available in the library as per title, author, subject, publisher, type of the learning resource and year of acquisition.

**Circulation:** Books in the library are referred by students and staff. This module is used to track the status of the book such as issued, returned, borrowed, and renewal by either student or staff.

**OPAC:** Online Public Access Catalogue provides the access to the library learning resources through various catalogues and indexes such as author, title and subject etc.

**Serials:** This module allows library to keep record of the periodicals and magazines.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

##### Response:

Institute central library procured various books related to engineering, architecture and competitive examinations such as GATE, GRE, TOEFL and IELETS in the last five years. It also subscribes national and international journals.

Details of rare books, manuscripts, special reports or any other knowledge resource such as name of the book, author and publisher and year of publication, procured for library enrichment in the last five years is as follows

##### Rare Books procured in the year 2012

- Green Roof Construction and Maintenance, Luckett K., McGraw Hill, 2009.
- Time - Saver Standards for Urban Design, Watson D. and etc, Tata McGraw Hill, 2011.
- Timeless Way of Buildings, Alexander C. and et al., Oxford University Press, 1979.
- Pattern Language: Towns Buildings, Construction, Alexander C. and et al., Oxford University Press, 1977.
- Green Facilities: Industrial and Commercial Leed Certification, Winkler G., McGraw Hill, 2011.
- Complete Works 1979-2009, Jodidio P., Hadid, Taschen, 2009.
- Temple Architecture of India, Hardy A., Wiley and Sons Ltd, 2007.

##### Rare Books procured in the year 2013

- Introduction to Structural Equation Modeling Using IBM SPASS Statistics and AMOS, Blunch N. J., Sage Publications Ltd, 2013.

##### Rare Books procured in the year 2014

- The Courtyard Wada of Maharashtra, Gupta R. R., Council of Architecture, 2013.

##### Rare Books procured in the year 2015

- Design and Construction of Concrete Floors, Garber G., Edward Arnold, 1991.
- Repair and Renovation of Modern Buildings, Chandler I., McGraw Hill, 1992.
- Standard Handbook of Structural Details for Building Construction, Newman M., McGraw Hill, 1993.
- Concepts in Cladding: Case Studies of Jointing for Architects and Engineers, Brookes A. J.,

Construction Press, 1985.

- Illustrated History of Landscape Design, Boult E. and Sullivan C., John Wiley and Sons, 2009.
- Sketch Up Workflow for Architecture, Brightman M., John Wiley and Sons, 2013.
- Structures and Construction in Historic Building Conservation, Forsyth M., John Wiley and Sons, 2007.
- Green is Red, Laul A., Council of Architecture, 2013.

#### Rare Books procured in the year 2016

- Archiving '14 Architectural Thesis, COA, Council of Architecture, 2015.
- Wastewater Collection Systems Management, Water Environment Federation (WEF), 2009.
- 50 Amazing Homes in India Volume- I, Benninger C. C., Skyboard Media Pvt Ltd, 2015.
- City Sence and City Design, L P5, MIT Press, 1995.
- Commercial Drafting and Detailing, Jefferis A. and Smith K. D., Aia, Delmar Cengage Learning, 2010.
- Site Planing, Lynch K., MIT Press, 1984.
- Smart Grid Home, Lynch K., CengageLearning, 2013.
- Architecture of Hasmukh C. Patel, Desai C. and Patel B., Mapin Publishing Company, 2017.
- Architectural Theory Handbook, Greig C., Sage Publications Pvt Ltd.
- Timeless Way of Building, Alexander C., 1979.
- Urban Housing Forms, Zhou J., Architectural Press, 2005.

#### 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.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)****Response:** 19.18

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
16.19149	14.51522	17.17834	20.96022	27.05199

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>

**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	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**4.2.6 Percentage per day usage of library by teachers and students****Response:** 5.13

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

Response: 120

File Description	Document
Details of library usage by teachers and students	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**4.3 IT Infrastructure****4.3.1 Institution frequently updates its IT facilities including Wi-Fi**

**Response:**

- The Institute has 594 computers, out of which 12 are servers and 559 computers are with internet connection. Total 68 different types of software are made available for carrying out their practical and project works of students.
- The Institute has 20 projectors, 12 scanners and 54 printers across all the departments. To cater the need of internet surfing, academic premises are facilitated with Wi-Fi.
- NPTEL video lectures are made available to the staff and students through intranet. These lectures are dumped on a server called Local Guru server and can be accessed through LAN.
- The institute is identified as remote center of IIT Bombay. This facilitates to conduct various workshops under the National Mission on Education through ICT (MHRD, GOI).

**Computing facility**

Number of computers and servers	594
Computer Student Ratio	1:4
Stand-alone facility	Yes
LAN facility	Yes
Wi-Fi facility	Yes
Licensed software	68
Number of nodes/computers with Internet facility	559

**Internet bandwidth with year of update**

Session	Bandwidth in Mbps
2012-13	4 To 8
2013-14	8
2014-15	8
2015-16	8 To 48
2016-17	48

**Number of nodes/ computers with Internet facility**

S. No.	Name of the Department	No. of Computers	No. of Computers with Internet Facility
1	Computer Technology	121	116
2	Architecture	39	39
3	Information Technology	176	176
4	Mechanical Engineering	52	35
5	Electronics Engineering	36	36
6	Engineering Science and Humanities	33	24
7	Electronics & Comm.	35	35

	Engineering		
8	Civil Engineering	47	47
9	Electrical engineering	25	25
10	Adm. Office	11	11
11	Library	19	15
<b>Total</b>		<b>594</b>	<b>559</b>

File Description	Document
Any additional information	<a href="#">View Document</a>

#### 4.3.2 Student - Computer ratio

**Response:** 3.69

File Description	Document
Student - Computer ratio	<a href="#">View Document</a>

#### 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:** 35-50 MBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 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	<a href="#">View Document</a>



## 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:** 98.65

#### 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
368.79418	463.82270	442.30770	393.12905	369.87632

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	<a href="#">View Document</a>
Audited statements of accounts.	<a href="#">View Document</a>

### 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:**

#### Infrastructure facility and its maintenance

Maintenance of infrastructure facility is being done by the in-house project engineer section. This section is headed by Project officer, who is responsible for the maintenance work of the Institute. In addition to the project engineer office, staff member from each department is designated as housekeeping in-charge in respective departments.

#### Maintenance of laboratories and its equipments

Each laboratory maintains the log book for equipments available. Lab incharge along with HOD of each department is involved in preparing the budget for the required consumables, procuring new equipments and their repairs. Major maintenance or repair work is outsourced to companies. Saturday is designated as maintenance day in a week. The laboratory mechanic does the maintenance work, records it in the maintenance diary and gets it verified by the respective Head of the departments.

#### Central library and maintenance

A register is maintained in the library for the entry, exit of the students and faculty. Dusting, mopping and cleaning is done by the sweeper every day. Electrical and other furniture are maintained by skilled person

from the project engineer section. Apart from the central library every department has departmental library which is maintained by the faculty in-charge of the respective department. Separate register is available for the issue and return of books.

### **Sport complex and gymnasium**

The Sport complex is maintained by a team from Physical Director's office which comprises of two trained support staff members under the supervision of Physical Director. Record of gymnasium utilization is maintained every day wherein students record their entry and exit time.

### **Maintenance of computers, internet and Wi-Fi**

Faculty in charge and Programmer/Data Entry Operator (DEO) are responsible for maintenance of computers and software for each computer laboratory. The internet and Wi-Fi systems are maintained by a team of technical staff under the supervision of Associate Dean (ICT). They maintain the smooth functioning of internet usage. Programmer/DEO carries out maintenance of each computer at regular intervals and record it in the maintenance record book weekly.

### **Maintenance of class rooms, tutorial rooms, and seminar halls**

One faculty from each department is assigned the duty of housekeeping. The housekeeping in-charge works in coordination with project engineer office for the maintenance of each room. Regular maintenance is taken care of by the project engineer section. The equipment and the furniture are repaired and maintained by the skilled workers from the project engineer section once in every three months or as and when required.

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

## 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:** 60.43

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
1395	1409	1550	1672	1637

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	<a href="#">View Document</a>
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 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:** 1.17

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
36	25	30	27	28

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	<a href="#">View Document</a>

**5.1.3 Number of capability enhancement and development 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**

**Response:** A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link to Institutional website	<a href="#">View Document</a>

**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:** 33.06

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
772	758	903	964	802

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 17.35

#### 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
465	433	408	517	365

File Description	Document
Details of the students benefited by VET	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 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	<a href="#">View Document</a>
Details of student grievances including sexual harassment and ragging cases	<a href="#">View Document</a>

## 5.2 Student Progression

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

**Response:** 20.51

#### 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
129	98	85	190	125

File Description	Document
Self attested list of students placed	<a href="#">View Document</a>
Details of student placement during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 1.03

#### 5.2.2.1 Number of outgoing students progressing to higher education

Response: 06

File Description	Document
Details of student progression to higher education	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 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:** 4.03

#### 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
12	08	07	18	03

#### 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
276	275	231	223	167

File Description	Document
Upload supporting data for the same	<a href="#">View Document</a>
Number of students qualifying in state/ national/ international level examinations during the last five years	<a href="#">View Document</a>

### 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:** 11

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
02	05	03	01	00

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

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

**Response:**

The Institution has an active 'Student Council' which is formed every academic Year. The selection of the "Student Council" is as per the norms of RTMNU. The Student Council is selected in the presence of a committee comprising of the Principal, Deans and HODs. The Student Council comprises of the following members:

- University representative
- Student representative
- All Class representatives
- All Forum/Clubs/Associations Presidents
- All Forum/Clubs/Associations Secretaries
- Cultural Secretary
- NSS Representative
- NCC Representative
- Sports Representative

Each academic department has a representative known as class representative, based on the academic performance of the student. Various clubs, forums and associations of each department have nominated student representatives. Based on nominations or sometimes even elections, all these representatives select a 'Student Representative'. This Student Representative acts as a representative of all the students. Student Representative is an active member in student council and various co-curricular and extracurricular activities.

The important highlighting features of the Student Council are as follows:

- The council works as a facilitator between the students and the Institute.
- It takes care of all the extracurricular, co-curricular activities and annual social fest of the Institute.
- It maintains the overall discipline on the campus.
- The University representative represents Institute at University level for various student activities.
- It provides information to the students regarding various beneficiary schemes available at Institute and University level and campaign to create awareness regarding these schemes.
- Budgetary provisions are made to take care of all activities conducted by the Student Council.

Various student chapters comprising of professional bodies like IEEE, ISTE, IETE, CSI, NASA are functioning through Student Council. Apart from these professional bodies, there are other forums/clubs/associations such as

- Civil Engineering association
- Mechanical Engineering association
- Electrical Engineering association (ELECTRICON forum)
- Electronics and Electronics & Communication Engineering association (ELECTROMATIX forum)
- Computer Technology association (Acquired Computing and Methodological Engineering- ACME forum)
- Information Technology association (INFOQUEST forum)
- Architecture association (Archi Association)
- Mathematics club
- Literary club
- Cultural club
- Sports Committee

The above mentioned clubs, forums, associations and committees of students work as a platform where the students can show their skills.



The 'Students Council' is responsible for conducting the annual day celebrations, sports day and national level technical fest 'TEKNODEON' smoothly. The Student's Council organizes a technical fest, 'TEKNODEON' which includes various activities like paper presentations, poster competitions, street plays and events like picture save, crack O circuit, construct, bob the builder, water jet propulsion, best manager contest, youth parliament etc. are conducted during these celebrations. Cultural evening 'Raga n Rock' is also conducted through the Students Council every year. On the occasion of Independence Day and Republic Day, street plays on social issues are performed by student groups under Student Council on topics such as 'Alcoholism', 'Evils of drugs', 'Save the girl child' etc.

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>

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

**Response:** 19

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
19	20	22	17	17

<b>File Description</b>	<b>Document</b>
Number of sports and cultural activities / competitions organised per year	<a href="#">View Document</a>

## 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 Institute has an independent alumni charter which organizes various alumni meets every year in and outside the campus. The Head of the departments, faculty and staff are in constant touch with the alumni through e-mail, social media and various activities conducted by alumni charter. Alumni are invited to deliver expert lectures and evaluate student projects. Faculty members are in personal touch with former faculty and alumni to collaborate for conducting faculty development programs and workshops. 16th of January of every year has been marked as 'Alumni Day' by the Institution. Every department invites distinguished alumni and arranges interaction with the present students. The alumni shares his/her

experience and the problem faced by him/her to the current students..

In the recent past, alumni meets were arranged on 19th Sept'15, 23rd Dec'15 and 16th Jan'16 where around 80 alumni attended and shared their experiences. The 1985 and 1990 batch alumni visited Institute campus during December 2015. The 1990 batch alumni interacted with the students of current batches. Few alumni meets also been organized in countries like UK and USA in the recent past. Presently, the alumni are planning to start quarterly webinars on individual topics for the benefit of all the students which would be available on a secure platform.

Over the years, KITS, Ramtek has provided a platform for various successful careers. This is evident from the success that has been achieved by our alumni across the globe. The Management of KITS is generous enough to provide employment to a large number of alumni of the Institute. At present, 45 alumni are working across various departments of the Institution. These alumni staff meets once in a month and decide the strategy to organize events for the benefit of current students.

Following are the activities carried out by Alumni charter :

- Provide a variety of benefits and services that help alumni to maintain connection with their educational institution and fellow graduates.
- Alumni groups often support new alumni and provide a forum to form new friendships and business relationships with people of similar background.
- Arranges guest lectures by alumni members and other prominent people for students on current technical and non-technical topics.
- Donates books to library.
- Organizes social events.
- Helps students to get sponsored projects and internships.
- Conducts mock interviews and resume writing sessions for enhancing placements.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

#### 5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

**Response:** <1 Lakh

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>
Alumni association audited statements	<a href="#">View Document</a>

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

**Response:** 10

##### 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
03	03	01	02	01

<b>File Description</b>	<b>Document</b>
Number of Alumni Association / Chapters meetings conducted during the last five years.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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:**

To achieve excellence, diversity in technical education and for achieving rapid and inclusive growth

Mission of our Institute is as follows.

**Vision:** To develop the Institute into a centre of excellence in professional and technical education.

**Mission:** To serve the nation by nurturing and developing professional technocrats and managers who would contribute to nation building.

In line with the vision of the Institute academic policies are decided by the management of the Institute. The decisions taken are communicated to the Head of departments by the Principal for effective implementation. Head of the departments then hold meetings at the department level with the faculty members to implement the same. The feedback from students, parents and other stakeholders are considered while framing the policies by the Governing Body.

Various redressal mechanisms are in place to deal with the issues like sexual harassment, staff and students welfare and so on. For addressing the same various committees are constituted which report to the Principal for corrective actions whenever required.

The emphasis is given on the students discipline and punctuality. It is monitored by class teachers and academic coordinators on daily basis. In order to prevent ragging, ragging prevention committee is constituted in the Institute (consisting of teaching and non teaching staff) which actively monitors the antiragging activities.

Various clubs and associations are formed with involvement of staff and student for conducting curricular, cocurricular and extra-curricular activities of the students. These clubs and associations groom the personalities of the students to make them employable and better professionals. Students are encouraged to participate in inter collegiate activities and are rewarded with suitable incentives.

For smooth conduct of University and Institute examinations, a committee is constituted under the guidance of Dean (Examination). Faculty members are encouraged to undertake research activities so that the students get benefit of on going research activities.

File Description	Document
Link for Additional Information	<a href="#">View Document</a>

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

#### **Response:**

The management set goals in consonance with the vision and mission of the Institute. The management regularly interacts with the Principal to review the implementation of the set goals. The management periodically reviews various academic, administrative and other related functions of the Institute.

The Principal proposes new initiatives to the management to strengthen the quality of education on the basis of changing educational scenario and chalks out the action plans in accordance with the goal set by the management. Principal communicates to the faculty members regarding the responsibilities and duties. Principal takes initiatives to develop the relationship with the eminent academicians, industries, professional bodies and other renowned Institutes.

Deans and Associate Deans are appointed for the important functions in Institute like examinations, student activities and Information and Communication Technology (ICT). Dean(Examination) is given the responsibility of smooth conduct of Institute and University examination. Associate Dean (ICT) takes care of providing ICT infrastructure. Associate Dean (SA) looks after various students activities.

The Heads of the department periodically conduct meetings to monitor the process of the academic activities, implementation of the policies regarding various issues with the staff members. The departments encourages the faculty for research, industrial visits, arranging guest lectures by eminent personalities.

Faculty members and non teaching staff are the member of Local Management Committee (LMC). Faculty members are also participating in various committees of University such as Board of Studies (BoS) and Academic Council. The students are encouraged to participate in the decision making process by their participation as class representative, student representative and University representative. In hostels, all the activities are managed by the hostelers through the hostel management committee consisting of the wardens, hall representative and mess representatives.

#### **Case Study**

#### **Result Improvement**

**The case study is presented to improve the results of the BE First year students. The following things were observed:**

- In order to improve the students' results, the management made an action plan and implemented it through the suggestion given by the Principal and HODs.
- The decision was taken at the meeting to identify the slow learners from all the sections based on their scores in sessional examinations.
- Special classes (Remedial classes) were conducted by the experienced faculty for such students to improve their academic performance.
- After the implementation of this practice, the first year results tremendously improved in the subsequent academic years.
- On observing a positive change in the result, the same practice was advised to be continued for further improvement during the subsequent years.

## 6.2 Strategy Development and Deployment

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

**Response:**

The Institute prepared a perspective plan which is reviewed at regular time intervals.

**The perspective plan of the Institute is as stated below:**

- Understanding local needs faced by the rural population with a special emphasis on the agriculture and allies areas.
- Effective interaction among student/staff, parent and other stake holders of the Institute through social service, extension activities, imparting technical skill for creating employment opportunities.
- Digital literacy and expansion of the ICT enabled services in academic and administrative processes.
- Strengthening of Industry Institute Interaction for the mutual benefit.
- Establishment of incubation center and to become center of excellence in various technology areas.
- Extension of solar powered electricity.
- Collaborations and exchange programs with international Universities and industries.
- Awareness about e-waste management.
- Refining technologies for making of renewable energy sources owing to the geographical location of the Institute thereby addressing the ecological concerns.
- Deputation of faculty members for higher education like Ph.D. and creating opportunities for research, copyrights and patenting.
- To attain the autonomous status for the Institute.

**Example of an activity successfully implemented based on the strategic plan**

Dr. R.K.Bopche, Professor of the Civil Engineering studied the ground water condition of Institute campus in depth, by taking monthly water levels in the existing open wells. The water level readings were collected during year 1992 to 1999 and it was concluded that even during rainy season, the water level of open well was remaining below the expected level by 4 to 5 meters. This was discussed with the management and accordingly report was prepared and submitted to the management and also submitted to Central Ground Water Board (CGWP), Central Region, Nagpur. CGWP considered the report and forwarded to the Ministry of Water Resources, Government of India, New Delhi. The ministry sanctioned an amount of Rs1.5 lakhs for the implementation of the roof top rain water harvesting at Institute in the year 2001. The scheme is still in working condition. Through this Roof Top Rain Water Harvesting scheme, the rain water is being percolated to the ground which recharges the ground water and increases the water level in the area.

File Description	Document
Any additional information	<a href="#">View Document</a>

### **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:**

Effective administration is very much essential in any organisation. For smooth administrative functioning, an organisation chart is prepared which is shown on the Institute website. To maintain quality and standards in effective and efficient manner each member of teaching and non teaching staff follow the practices mentioned in the administrative manual of the Institute. For the proper functioning of Institute, hierarchy is maintained as per the organisation chart and responsibilities are carried out at all the levels.

#### **Management body:**

- The Management confine to formulated vision, mission and objectives and has healthy surveillance with regard to implementation of the same.
- Providing adequate financial support as and when needed.
- Periodic meeting of management with Principal and accordingly meeting of Principal with HODs facilitates smooth day to day functioning of the institution.
- Annual meeting of the management with all staff members.

#### **Principal:**

- Principal of the Institute takes every effort to ensure that the decisions taken at the top level percolate to all levels for effective implementation of the same.
- Principal plays a healthy supervisory role by delegation of authorities through various committees.
- Principal plays a vital link between the faculty, administrative staff and management.
- Principal plays a role model for the faculty members in enhancing academic credentials and inculcating total quality management culture among the administrative staff.
- Principal acts as a chief warden for boys and girls hostels.

#### **Deans and HOD:**

- Dean (Examination) coordinates with examination committee for smooth conducting of University/Institute examination.
- Associate Dean (ICT) regularly monitor the activity related to computing facilities and ICT needs.
- Associate Dean (Student Activity) is responsible for co-curricular and extra curricular activities of different clubs and associations.
- HODs are responsible for all the academic activities of the department and for mobilizing the faculty members to arrange guest lectures, seminars, conferences and getting research grant including collaborations with the different industries.

#### **Functions of various committees:**

- Student council consist of class representatives, representatives from each club and association and is responsible for conducting various student activities through out the year.
- Ragging prevention committee is established in the Institute to completely wipe out ugly scar of ragging obliterated from the face of educational institutions and providing ragging free

environment to students.

- The Institute has grievance redressal cell to address and redress the grievances of staff and students.
- The Institute has an Internal Complaint Committee (ICC) to look after the complaints of ladies staff and girl students.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

### 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

**Response:** B. Any 4 of the above

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:**

Governing Body, Governing Council, IQAC and Head of the department conducts meeting to



discuss issues, frame the policies and prepare minutes of the meetings. Action plans are prepared accordingly. Progress of decided policies is reviewed regularly by the concerned authority. The Institute has various committees for smooth and effective functioning. Some of them are listed below.

- IQAC committee
- ICC committee
- Ragging Prevention Committee
- Grievance Redressal Cell

An IQAC contributes to the institutionalizing quality assurance strategies and processes for various academic and administrative activities.

An ICC is formed in the Institute to look into prevention of sexual harassment of ladies employee and girl students, redressal mechanism and creating a sense of security in the workplace.

Institute has Ragging Prevention Committee to prevent the ragging in the Institute. Committee members are directed to prevent the ragging in and outside the campus. Faculty members conduct awareness programmes among the students and counsel them, if necessary. Members take frequent rounds in the campus and surrounding to keep close watch on the activities. As a result of this, ragging free atmosphere is maintained in the Institute and no ragging complaint has been received so far.

The Institute has Grievance Redressal Cell for prompting and effective disposal of grievances of various stake holders. This committee is constituted for the overall well being of staff and students. Suggestion boxes have been installed in the Institute.

File Description	Document
Any additional information	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

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

#### Response:

Institute has implemented the following effective welfare measures for teaching and non-teaching staff of the Institute.

- KITS Employees Welfare Fund (KEWF) for providing emergency financial assistance to all employees of Institute in the matters of exigencies.
- Concession in school bus fair for wards of the staff.
- Incentives to faculty who are pursuing higher studies.
- Group insurance, gratuity and provident fund schemes for the employees.
- Residential staff quarters facility at subsidized rates.
- Concession in tuition fee for wards of the staff.
- Incentives to the faculty for publications/presentations in reputed journals/conferences.

- Staff sponsored for higher studies.

### Sponsored faculty members for higher education for M.Tech. and Ph.D.

Year	Teaching	Total number of Faculty sponsored for Higher Education
2012-13	142	6
2013-14	141	5
2014-15	148	3+1 Ph.D
2015-16	154	3+1 Ph.D
2016-17	145	1+1 Ph.D

File Description	Document
Any additional information	<a href="#">View Document</a>

### 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:** 22.55

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
17	50	45	22	32

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc. during the last five years	<a href="#">View Document</a>

### 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:** 5

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
05	07	08	03	02

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	<a href="#">View Document</a>
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**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:** 60.58

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
71	148	131	59	39

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	<a href="#">View Document</a>
Details of teachers attending professional development programs during the last five years	<a href="#">View Document</a>

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

**Response:**

**Teacher appraisal process**

Faculty members undergo through the appraisal process. Every year faculty members of all departments are provided a proforma for self assessment, which consists of the following details

- Upgradation in academic qualifications after joining the Institute.
- Promotion received if any.
- Semester wise performance about attendance of students.
- Preparation of laboratory manuals.
- Performance about engaging theory and practicals.
- Reading/Instrumental material provided, use of additional knowledge reasons for subject enrichment
- Innovation and contribution in design of curriculum.
- Project works undertaken.
- Details of research papers published/presented.
- Research contribution.
- Co-curricular activities undertaken.
- Professional development activities
- Extracurricular activities undertaken.
- Administrative duties performed either at the department/Institute level.

Confidential report part is filled by the concerned HOD about the faculty members.

#### **Non teacher appraisal process**

Every year for non teaching staff of the Institute a proforma (questionnaire) is provided which has to be filled by respective lab in-charges and HODs. It consists of the following details like

- Nature of appointment
- Educational qualifications
- Punctuality in attending the duty
- Ability to work for extra hours with responsibility
- Upkeepment of the lab records
- Level of intelligence as compared with other employees

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>

## **6.4 Financial Management and Resource Mobilization**

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

#### **Response:**

- At the end of every financial year, the Institute conducts audit through auditor.
- Institute maintain accounts as per the procedure.
- It also provides complete details of balance sheets which includes income, expenditure, use of

estimates, revenue recognition, fixed assets, depreciation and previous year figures are recast and regrouped whenever necessary.

The Institute has a well formulated financial policy which ensures effective and optimal utilization of finances for academic, administrative and development purpose. Every year, the budget is prepared well in advance by taking into consideration the financial requirements of every department. Each department prepares the budget based on the recurring and non-recurring requirements such as equipments consumables required for the next academic session. The budget proposed by the department is reviewed by the Principal and the management reviews the budget forwarded by Principal and approve this after necessary changes. As and when required, the Institute makes a provision for advance/ additional funds. The Principal and the Heads of the department discuss the requirements and decide the priorities while allocating funds for various purposes ensuring optimum utilization of available fund. The Principal monitor the purchase as per the sanctioned budget. Budget utilization is periodically reviewed by the management and corrective measures are taken, if required.

Financial audits are conducted by a chartered accountant every financial year to verify the compliance with established processes.

File Description	Document
Any additional information	<a href="#">View Document</a>

#### 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:** 1.08

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
0.105	0.97	00	00	00

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	<a href="#">View Document</a>
Annual statements of accounts	<a href="#">View Document</a>

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

**Response:**

The Institute's main source of income is tuition fees received from the enrolled students. The Institute also tries to mobilize resources from the other sources as well like.

- Grant received from government/non government agencies.
- Donation from alumni and well wishers.
- Consultancy

The Principal and the Head of the departments discuss the requirements and decide the priorities while allocating funds for various purposes ensuring optimum utilization of available fund. Budget utilization is periodically reviewed by the management. The Institute has a well formulated financial policy which ensures effective and optimal utilization of finances for academic, administrative and development purpose. Every year, the budget is prepared well in advance by taking into consideration the financial requirements of every department. Financial audits are conducted by a chartered accountant every financial year to verify the compliance with established processes.

File Description	Document
Any additional information	<a href="#">View Document</a>

## 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:

Institute has Internal Quality Assurance Cell (IQAC). It contributes institutionalizing quality assurance strategies and processes in the following ways.

- Development and application of quality benchmark/parameters for various academic and administrative activities of the Institution.
- Documentation of various programs/activities leading to quality.
- Acting as a nodal agency of the institution for quality activities.

Two examples of the best practices institutionalized as a result of IQAC initiatives are

- Parent teacher meet
- Implementation of Program Outcomes (POs) and Course Outcomes (COs)

During the current academic year, two parent teacher meetings were conducted and feedback collected from the parents for the improvement of the academic performance. Parent feedbacks are used as significant inputs for quality improvement. COs and POs of all courses are prepared by the concerned faculty. The COs and POs are uploaded on the Institute website.

File Description	Document
Link for Additional Information	<a href="#">View Document</a>

### 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 Institutional reviews and implementation of teaching learning process and structure is given with following example

#### National Institutional Ranking Framework (NIRF)

The National Institutional Ranking Framework (NIRF) outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations broad understanding arrived at by a core committee set up by MHRD to identify the parameters for ranking various universities and institutions. The parameters broadly cover Teaching, Learning and Resources, Research and Professional Practices, Graduation Outcomes, Outreach and Inclusivity and Perception.

The Institute has participated in NIRF from last two academic years.

The NIRF report of the Institute is published in the website (www.kits.edu). This report include following information

- Sanctioned (approved) intake
- Total actual student strength
- Placement and higher studies
- Entrepreneurship
- Top University admission data
- Ph.D. student details
- Faculty details
- Financial resources
- Women diversity
- Sponsored research details
- Executive development program facilities for Physically Challenged Students (PCS)

#### Parents and Students Feedback

Constructive feedback given by the stake holders of the institution are useful for improvement in educational environment. The Institute do conduct students, parent teachers meet and seek the feedback from the students and parents. Positive feedback are obtained on teaching learning and discipline in the Institute. Some of them passed on healthy suggestions which are taken into consideration.

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:** 0

#### 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
00	00	00	00	00

<b>File Description</b>	<b>Document</b>
Number of quality initiatives by IQAC per year for promoting quality culture	<a href="#">View Document</a>
IQAC link	<a href="#">View Document</a>

### 6.5.4 Quality assurance initiatives of the institution include:

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

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:** D. Any 1 of the above



File Description	Document
e-copies of the accreditations and certifications	<a href="#">View Document</a>
Details of Quality assurance initiatives of the institution	<a href="#">View Document</a>

### 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 IQAC cell is formed recently in the year 2017, although some practices are already institutionalized in last five years.

#### Administrative Improvement

- Biometric attendance system is implemented for employees of the Institute from the year 2010. The employees are recording the biometric attendance in in-and-out times.

#### Academic Improvement

- In Institute, faculty are required to complete 100% syllabus in respective course.
- Faculty are permitted for higher studies for improvement of their qualifications.
- Cash incentives to the faculty members are awarded for National and International publications.
- Cash incentives to the student getting University ranks/class toppers.
- Most regular students (attending maximum number of classes semester wise) are felicitated every year in annual day celebration.
- Career Prospects and Planning (CPP) and Soft Skill Development (SSD) classes are conducted for third and final year students to improve the personality/competency.

#### Result Improvement

- In order to improve the students result, the Institute made an action plan.
- As part of this, department identify the slow learner from all the sections based on their scores in sessional examination.
- Special classes are conducted by the experienced faculty for such students to improve their academic performance.
- After the implementation of this practice, the BE first year result improved in the subsequent academic years.
- After observing a positive changes in the result the same practice is advised to continue.

## 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:** 5

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
01	01	01	01	01

#### 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:**

#### Safety and Security

KITS being a residential Institute has separate hostels for boys (Jamuna and Triveni) and for girls' (old Kaveri and new Kaveri) with overall capacity of more than 1000 students.

These hostels have well maintained dinning facilities where meal is served in air-cooled halls. Institute also have canteen in the campus for staff and students.

Institute have ten number of wardens who look after the smooth running of the hostels. All the wardens are residential who stay either in the hostels or in the quarters provided in the campus. The chief and senior warden controls the smooth functioning of all the hostel related issues.

Lady guards are deputed in girl's hostel for their security. The wardens also take care of students and inspect the hostel premises on regular basis. A departmental store is available in the premises of girls hostel to meet the daily needs of the girls. Foot patrols are also conducted to ensure complete safety in the

campus. Safety awareness programs and seminars for precautions from exploitation, theft and self-defense are conducted in the Institute.

The Institute maintains a single point entry/exit for all students. Girls and boys have to seek permission from corresponding wardens before leaving the hostel. Gymnasium and sports facilities are availed by staff and students in their respective time slot. Special care is taken while dealing with girl students. There is a special Grievance Redressal Cell to address the problems and issues of girl students and ladies staff.

Complaint box is installed in the administrative block in which the students can drop their grievances and suggestions.

### Counseling

The Institute offers counselling system to each student. Batch of 15 to 20 students is allocated to each counselor. In counselling, student can discuss their academic, personal and other related issues. To make counseling system effective, one particular slot is provided in the time table of each department.

### Common Room

The Institute offers separate girls common rooms which are situated in all the buildings of the Institute. The spacious and airy common rooms are fully accommodated to give comfort to the girl students. The girl students can spend their free time comfortably in common rooms.

File Description	Document
Any additional information	<a href="#">View Document</a>

### 7.1.3 Alternate Energy initiatives such as:

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

**Response:** 13.1

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

Response: 9300

7.1.3.2 Total annual power requirement (in KWH)

Response: 71000

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**7.1.4 Percentage of annual lighting power requirements met through LED bulbs****Response:** 1.62**7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)****Response:** 3**7.1.4.2 Annual lighting power requirement (in KWH)****Response:** 185**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:****Solid Waste Management:**

- Dustbins are placed at different locations at Institute such as office, departments, hostels, staff quarters and messes from which waste material is collected regularly.
- This waste is separated into different categories such as biodegradable and non- biodegradable.
- Wormy compost is produced from biodegradable solid waste which is used as manure for plants in the campus.
- Excess food waste is supplied to Nagar Parishad, Ramtek where it is used for power generation.
- Bio-gas plant has been installed near mess and the kitchen waste from the mess is used to generate the gas for cooking.

**Liquid Waste Management:**

Waste water treatment through constructed wetland

- Pilot plant batch studies were carried out at Institute for the treatment of domestic waste water using the selected macrophytes available in Ramtek region.
- The source of sewage is from students hostel, staff quarters and academic complexes comprising about 1000-1500 inhabitants. Domestic waste water from hostels is carried through a proper drainage system to septic tank.
- Free water surface constructed wetland (FWSCW) was constructed near septic tank at lower level. Plantation was done with a plant density of four to five plants per sq. mtr.

- The plants Typhalatifolia and Cannalily were collected from the banks of a local stream and natural wetland.
- Effluent of septic tank is taken to FWSCW for its natural treatment.
- Treated waste water of FWSCW was used for gardening purpose especially during hot summer when there is a scarcity of water on campus.

#### E-waste management :

- The outdated computers which are in working conditions are donated to the local schools.
- These computers are used in the local schools for educating students from poor background about the computers.
- The non-working computer spare parts, electronic scrap components, switches and hubs are used in practical session. This helps student understand working of computers and networks. Most of the times, they are sold as scrap to local vendors.

File Description	Document
Any additional information	<a href="#">View Document</a>

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

##### Response:

A scheme of Rainwater Harvesting for two buildings of Institute was approved by Central Ground Water Board (CGWB) under Central Sector Scheme for artificial recharge during year 2001-2002. The schemes were proposed for the top roof of Information Technology (I.T.) department and Triveni hostel building of the Institute. The scheme of I.T. building was taken up immediately after getting the funds of amount Rs.1,42,363/- as per the approval of CGWB.

The scheme was executed by the Department of Civil Engineering as per the approved design with minor site specific modifications.

Ground water is the only source of water for various uses in the campus. There are six bore wells out of which four bore wells are high yielding. The yield of the wells is ranging between 1500 to 15000 lph. Details of bore wells are given in the table below.

Well No.	Location	Total Depth (m bgl)	Casing Length (m bgl)	Yield (lph)
BW1	Near MED	70	19	15000
BW2	Near Dug Well	70	26	15000
BW3	Near Staff Club	70	18	14800
BW4	Near Triveni Hostel	64	36	11000

BW5	Near Lib. Bldg.	61	30.5	1500
BW6	Hand-Pump	67	24	1500

\* m bgl - metre below ground level; lph – litre per hour

Broad objectives and aims of undertaking the roof top rainwater harvesting scheme in the Institute campus are as follows:

- To investigate the feasibility of artificial recharge to ground water through rainwater harvesting in crystalline schist rock area.
- Ground water augmentation for sustainable ground water based water supply as a model case study in the area.
- To install a pilot project in specific geological condition for its day to day monitoring.
- To enable the students vis-a-vis future engineers to understand the importance of ground water recharging which can be propagated by them in future.

### Utilization in Campus

- It is estimated that water of 2238 cu.mtr. / year will be recharged through the recharge wells, considering average annual rainfall 1118mm and 10% losses due to leakages.
- Remaining rain water from roof top is discharged in open land and water is allowed to percolate in the ground.
- It was observed that the discharge of the existing water supply bore wells located at a distance of 100 to 200 metre have increased by 500 to 1000 litres / pumping hour during the monsoon and post monsoon season. This is due to the rise in water level resulted in the area from additional recharge to ground water.

File Description	Document
Any additional information	<a href="#">View Document</a>

### 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:

- The Institute lies in a huge campus of 50 acres of land and has lush, green, sprawling lawns which are neat and clean. The management is very careful about the greenery of campus. The lawn occupies about four acres of land and plantation made everywhere in the open places to keep environment free from pollution.
- The campus is well known for its beautiful rose gardens and tall ashoka trees. Tree plantation

programs are conducted every year by NSS in the campus and nearby villages. To reduce the pollution, most of the students who are staying nearby use bicycles. The roads inside the campus are pedestrian friendly. Staff members and students commuting from Nagpur, use bus and car on sharing basis.

- Student's progress reports are sent to the parents through SMS in order to save paper and hence trees . One sided papers are used for office work to optimize the use of papers.
- To make the campus plastic free, steel plates and biodegradable cups are used in canteen and in programs such as seminars and conferences. Placards saying "Say No To Plastic" are displayed near canteen, mess and hostels so that the students and the staff keep the campus plastic free. Use of natural lighting and ventilation to avoid day time lights.
- Students organize many co-curricular and extra-curricular activities throughout the year based on eco-friendly concept.
- Environmental studies is made compulsory part of curriculum by RTMNU to inculcate the importance of eco-friendly environment.

### Energy saving strategies

- Most of old computers are replaced with energy efficient models.
- Efforts are made to check whether the electrical appliances are switched off when not in use.
- Optimal use of air conditioning.

<b>File Description</b>	<b>Document</b>
Link for Additional Information	<a href="#">View Document</a>

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

**Response:** 2.96

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

2016-17	2015-16	2014-15	2013-14	2012-13
21.35	14.37	8.99	8.26	7.26

<b>File Description</b>	<b>Document</b>
Details of expenditure on green initiatives and waste management during the last five years	<a href="#">View Document</a>

### 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:** C. At least 4 of the above

File Description	Document
Resources available in the institution for Divyangjan	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 26

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
05	06	05	05	05

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 7.1.11 Number of initiatives taken to engage with and contribute to local community during the last



**five years (Not addressed elsewhere)**

**Response: 12**

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
02	02	02	03	03

File Description	Document
Report of the event	<a href="#">View Document</a>
Details of initiatives taken to engage with local community during the last five years	<a href="#">View Document</a>

**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	<a href="#">View Document</a>

**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	<a href="#">View Document</a>

**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	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

<b>7.1.15 The institution offers a course on Human Values and professional ethics</b>	
<b>Response:</b> Yes	
File Description	Document
Any additional information	<a href="#">View Document</a>
Provide link to Courses on Human Values and professional ethics on Institutional website	<a href="#">View Document</a>

<b>7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions</b>	
<b>Response:</b> Yes	
File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	<a href="#">View Document</a>

<b>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</b>	
<b>Response:</b> 09	
File Description	Document
List of activities conducted for promotion of universal values	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

<b>7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities</b>	
<b>Response:</b>	
<b>National Festivals</b>	

India is land of multi-ethnicity where people of different languages and cultures live together with peace and harmony. India is known for cultural diversity and colorful festivals. National festivals are associated with the spirit of patriotism. The national festivals are associated with golden ages in the history of the country, which played an important role in nation building.

Institute celebrates various national festivals and birth anniversaries of great Indian personalities to maintain the national integrity and to convey the contribution of great personalities to the students.

The birth anniversary of Father of India Mahatma Gandhi is celebrated on 2nd October as a Gandhi Jayanti to honor his contribution and sacrifices to liberate India. On this day Principal, staff and students pay respect to Mahatma Gandhi and recollect his 'satyagraha' and non-violence.

Independence Day is celebrated on 15th August with great enthusiasm. The flag is hoisted by the Principal. NCC parade is carried out to mark the occasion. Students present various skits on social issues to create awareness.

Republic Day is celebrated on 26th January every year to mark the completion of the country's transition to become an independent republic. On this day flag hoisting program is conducted. NCC cadets carry out the parade. Various sports events are organized for staff and students. Also prizes are distributed to the students for their achievements in sports and other activities to commemorate the occasion.

Every year 'Teacher's Day' is celebrated in our Institute on 5th of September for recognizing teacher's contribution to the society and nation building. 5th September is the birthday of our former President Dr. Sarvapalli Radhakrishnan who was highly devoted towards education. Students organize programs in each department on this occasion.

Institute celebrates 'Engineers Day' on 15th September every year as a tribute to the greatest Indian engineer Shri.Mokshagundam Visvesvaraya. On this day, the contribution of Sir Mokshagundam Visvesvaraya in the field of engineering and technology is acknowledged. A guest lecture is organized to motivate the students and share the views of renowned personalities.

Every year Institute celebrates 'Martyrs' Day on 30th January. On the eve of Martyrs Day students of NCC cadets organize blood donation camp. Students and staff of the Institute donate blood as a part social commitment.

Institute celebrated Dr .A.P.J. Abdul Kalam birth anniversary as "Vachan Prerna Din" on 13th October. At the outset, a documentary on Dr. A.P.J. Abdul Kalam was shown to all students and staff. Students spoke about the inspiring life work of Dr. A.P.J. Abdul Kalam towards the buildup of India as a nation and also contribution in area of science and technology in India.

On account of birth anniversary of Swami Vivekanand, Institute celebrates 'Youth Day' every year and conduct paper presentation competition at Intra-university level.

File Description	Document
Any additional information	<a href="#">View Document</a>

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

#### Response:

#### Financial

The Institute maintains the complete transparency about the financial matters. Every year auditing is carried out through Chartered Accountant.

The fee of various courses is decided by the Fee Regulatory Authority and sanctioned amount is collected from the students as a tuition fee.

Employees salary, Employee Provident Fund (EPF) is paid as per the norms of government. Income tax of all employees is deducted at source and paid regularly.

All departments send proposal for the budget requirement to the Principal and budget is allocated after discussing in governing council meeting. Each department maintains the record of expenditure for recurring and non-recurring expenses in the department as well as centrally. All types of payments such as college fee, exam fee and other fee are collected through the bank only to maintain the accountability and transparency. Payments of salaries of staff and other bills etc. are made through NEFT/RTGS or cheque.

#### Academic

Academic planning is done at the beginning of every session via involvement of Deans, HODs and Principal.

All head of the departments conduct the meetings in the respective department to implement the academic policies of the Institute and accordingly plan the detailed academic schedule for all the activities to be carried out in the semester.

All faculty members prepare detailed teaching schedule for the subject and plan the extra classes if needed from the beginning. Log report is submitted at end of each month which shows the execution of academic plan of each faculty about the class work, practicals, counseling and other responsibilities.

The guidelines are defined well in advance to evaluate the student's project work, industrial training, mini projects and summer/winter training work. Various committees are formed for the smooth and fair implementation of the same.

Two mid sessional exams are conducted in each semester. Progress report is send via SMS to the parent.

Internal marks are finalized as per the guidelines decided by the Institute and transparency is maintained by showing the mid sessional paper and attendance to the students.

Co-curricular and extra-curricular activities are conducted through various associations and clubs in each department. The executive body is selected through systematic procedure under the supervision of staff in-charges along with Head of the department and Associate Dean (Student Activities).

### **Administration**

Institute has well organized structure for administration, with Principal as the head of the administration. Various policies are decided by the management of the Institute with inputs from various stakeholders and same are implemented in the Institute with an active participation of the Deans, Associate Deans, HODs.

The minutes of meetings held by the Principal are circulated among the staff of the Institute.

Deans and Associate Deans are appointed for the important functions in college like examination, student activity and ICT for the smooth conduct of examinations, student programs and provision of ICT requirements.

Other allied departments are established for specific work such as

- Project Engineer Section to take care of infrastructure and maintenance.
- Training and Placement to look after training and placement of students.
- Physical Education Department to look after games and sports events of the Institute.
- Hostel office to take care of hostels both boys and girls.
- Library to access the text books, journal, magazine, news paper etc.

## **7.2 Best Practices**

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

#### **Response:**

#### **Best Practice-I**

##### **1. Title of the Practice: Students Counseling**

##### **2. Objective of the Practice:**

- To make the students comfortable in the era of stressful competition, so that they perform to their maximum potential in academics as well as co-curricular and extracurricular activities.
- To guide the students with day to day issues or issues related to their academic performance.
- To inculcate problem solving and decision making ability in the students.
- To make the students self-confident so that they can deal with the different issues likely to face by them in future.
- To create better understanding between students and teachers which helps in creating a harmonious atmosphere in the Institute.

##### **3. The Context:**

For students to be able to learn at their peak capacity, they need to be physically, emotionally, intellectually and spiritually well. In today's era of cut throat competition, students often suffer from stress and become depressed easily either for academic reasons or for any other personal problems. During the process of overcome the student often go astray. Sometimes academic failures or even failure in personal relationships lead them to put their lives in jeopardy. In order to prevent students from going astray and help them resolve their issues related to personal, academics or any other issues, counseling of students is a requirement of the day and time.

The counselors need to know the social and economic background of the students to know them well so that they can understand their issues and problems.

Since, the Institute has the responsibility to build and develop the personality of the students. We need to counsel the students for raising their self-confidence and developing their positive thinking ability.

#### **4. The Practice:**

The main focus of the counselor is to understand the problems or issues of the students and develop their mindset so that they resolve their issues in a positive manner.

The counselors, who are the guardian teachers are usually faculty members of respective departments. They assist the students by guiding them in the right direction for aspects of problem solving and decision making. One dedicated slot is provided in the time table of every semester of each department. A group of 15 to 20 students are under each counselor and attending counseling classes is mandatory. Counselors maintain the attendance register for the students present during the counseling session.

The students discuss their problems related to studies, hostels, curricular activities, health and many other issues including their personal problems with their counselor during counselling period. The counselor discusses these problems and help in resolving these issues. Progress reports and attendance of students are sent to their parents after the first mid sessional examinations. At the completion of their degree course, a character certificate is issued to the students which is based on counselor's report.

Sometimes the problems that are resolved during counseling are depression, anxiety and addiction. Many students have such low self-esteem that they find it difficult to attend classes or do their assignments once they fail. There are students who enter freshman year with the plan to major in a certain field (branch) without having much idea about the kind of job they are going to land into. This leads them to great anxiety.

To help the students in resolving their issues, Institute has made efforts in the form of establishing individual counseling system to provide intervention to the students, so that their social and emotional problems do not interfere with their academic performances.

In the Institute counselors maintain student's personal and academic profile for each semester. In student profile all the conversation details, academic progress in terms of mark sheet, personal details of the student are maintained by counselor. This data helps counselor to understand student emotionally, academically and personally. It also helps in the proper designing of the execution of curriculum for students.

#### **5. Evidence of Success**

Result shows that the counseling practice in Institute has been effective in solving student's personal difficulties. The moral support given by individual counseling seemed to have a positive influence on the academic performance and the number of sessions correlated positively with the academic performance.

Participation of the students has increased in various co-curricular and extracurricular activities. Students are also trying to solve the problems of local community through their project work. The ability to communicate has increased gradually. Student's performance in competitive examinations has also improved.

## **6. Problems Encountered and Resources Required**

The most common problem that the counselor encounters with the student is that students are introvert and hesitate to discuss their personal problems. This is because students in this Institute mostly come from rural areas and have weak educational background. So, there is a lukewarm response in the parents meeting which is well below the expectation. Contacting students' and their parents is also a problem as contact numbers are frequently changed and not informed to the counselors.

To send the progress report of students to their parents, counselor takes the help of SMS facility. Regular parent teacher interaction is necessary to discuss the issues related to academic performance of students. Sometimes, professional counselors are required for special counseling session.

## **Best Practice-II**

**1. Title of the Practice:** Institutional Book Bank Scheme (IBBS)

**2. Objective of the Practice:**

- The main objective of the scheme is to benefit the students who are economically weak.
- To provide the required books to the students irrespective of their caste or creed or category.
- To increase the quantity of books in library.
- To optimize the use of books.
- To make a habit of using text books to the students.

**3. The Context:**

- Book Bank Scheme (BBS) for scheduled caste / scheduled tribe students is introduced by the state Government of Maharashtra in association with Social Justice and Special Assistance Department. This scheme is being funded by the Central Government of India. Under this scheme, the government provides book bank for medical, engineering, agriculture students of scheduled caste and scheduled tribe in Maharashtra.
- Book Bank Scheme is very useful for the reserved category students such as SC/ST students who are economically weak. But students of other communities can not avail this scheme.
- To take care of the students of all category and who are economically weak, Institute has started the Institutional Book Bank Scheme (IBBS).

**4. The Practice:**

- Institute Book Bank Scheme was started in the year 2003 to provide the books to economically

weak students of all categories. In this scheme, students can demand any text book / reference book irrespective of availability in the library.

- Once the request is received by the library, the books are issued immediately. In case of unavailability, the Librarian purchases the book within 3 days. The cost of books are informed to the student and a challan is issued to the student which is to be paid in UCO bank located in the premises of the Institute. The books are then issued to the students after receiving the payment challan from student.
- At the end of semester, when student returns the books, 80% of total amount is transferred to the students bank account.
- Through this scheme, students can use the books as per their requirement at the cost of 20% of total cost. Students have to maintain the good condition of books.
- This scheme was started with an investment of Rs.16,417/- by purchasing 327 no of books in 2003-04 and it has reached to a collection of 13622 no of books costing Rs.34,46,405/- as on today.

## 5. Evidence of Success

Institutional Book Bank scheme becomes a popular among the students and number of benefited students have increased.

Detail expenditure and books purchased is given in table:

Details of Institute Book Bank Scheme

Year	Amount spent on books in Rs.	Total no.of. books purchased	No. of students benefited.
2003-2004	16417	327	29
2004-2005	84620	546	155
2005-2006	69339	702	331
2006-2007	182199	1331	569
2007-2008	368198	1646	540
2008-2009	593618	1539	749
2009-2010	62245	792	984
2010-2011	143463	552	1136
2011-2012	253741	925	1543
2012-2013	498002	1244	1891
2013-2014	500931	2278	1774
2014-2015	413909	1176	1418
2015-2016	147901	383	1161
2016-2017	111822	181	1261
<b>Total</b>	<b>3446405</b>	<b>13622</b>	<b>13541</b>

Comparison of students benefited from BBS and IBBS in last five years.



Year	No. of students benefited by BBS	No. of students benefited by IBBS
2012-2013	437	1891
2013-2014	574	1774
2014-2015	527	1418
2015-2016	512	1161
2016-2017	550	1261
<b>Total</b>	<b>2600</b>	<b>7505</b>

The above table shows that the IBBS is beneficial to the economical backward students of all communities leading to socio-economic justice.

## 6. Problems Encountered and Resources Required

- Initially there was problem for initial investment to procure books for all students.
- Variation in the demand for the books of students.
- Up keep and maintenance of books is an uphill task.
- Lack of interest in the students in reading text books.
- Motivation to students to use text books.

File Description	Document
Any additional information	<a href="#">View Document</a>

## 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:

#### Vision:

The vision of our Institute is to develop the institute into a center of excellence in professional and technical education.

#### Priority:

To fulfill the above said vision the Institute is giving top priority to develop in certain areas. Since Institute is located far away from the city, focus is on providing technical education to rural students and encouraging economically backward students to pursue technical education.

The Institute focuses on covering 100 percent syllabus coverage of every course. Attendance of the students is monitored continuously and their performance is analyzed twice in each semester. Remedial classes are arranged for the academically weak students or the slow learners. Soft skills development classes and career counseling classes are arranged to develop the overall personality of students and thus build their confidence. The Institute also gives maximum placement opportunities to the students.

## Thrust

The Institute provides best opportunities to the students of nearby villages to avail technical education and build their careers. For the effective implementation of the curriculum, the Institute meticulously designs and develops the action plans. The Principal of the Institute conducts meetings regularly with the Head of Departments and the Deans to plan, develop and implement effective ways of teaching and learning process.

The Institute provides best hostel facility to both girls and boys students with all amenities. The Institute also having Library, Bank, Post Office, ATM's, departmental stores, gymnasium, canteen etc. in the campus. Thus, the students get ample time for their studies without wasting time in commuting.

The Institute focuses on completion of the 100% syllabus. In this regard, faculty members are instructed regularly by the Principal as well as HOD's to plan extra lectures if required. Apart from regular classes, the Institute conducts various case studies, guest lecturers and workshops to enhance the learning capability of students. The Institute identifies academically weak students and then the remedial classes are conducted for such students so as to raise their academic performance.

The Institute also monitors attendance of the students regularly. In this regard, the students are motivated constantly to improve their attendance and maintain more than 75% attendance. To motivate students for attendance, Institute has constituted 'Most Regular Student' award, which will be awarded during annual prize distribution ceremony. The counseling system of the institution is very strong where students share their academic and personal problems with the counselor. Parent-teacher meetings are conducted to keep the parents well informed about the performance of their wards.

The Institute maintains very high discipline inside the campus and it does not support any kind of ragging within the Institute and in hostels. Every year ragging prevention committee is reinstated, which prevent the incidence of ragging of any kind inside and outside the Institute campus. Faculty members are encouraged to participate in various kinds of seminars, conferences or workshops to keep themselves updated in their respective subjects. They are motivated to pursue higher education and also to write books. They are also encouraged to practice innovative teaching methods such as delivering lectures through presentations, assignments, discussions, workshops, seminars etc.

Apart from the regular teaching, the Institute also organizes several expert lectures, workshops and guest lecturers to encourage industry-academia interface among students and faculty members on a regular basis. Industrial visits are regularly arranged for the students to make them familiar with the process of industry and upgrade their knowledge.

File Description	Document
Link for Additional Information	<a href="#">View Document</a>

## 5. CONCLUSION

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### **Additional Information :**

The Institute is one of the recognized Remote Centers of IIT Bombay and IIT Kharagpur for conducting ISTE workshops under National Mission Education through Information and Communication Technology (NMEICT), Ministry of Human Resources Department (MHRD). So far 15 workshops have been conducted at this remote center. The Institute is also associated with IIT Bombay and received a grant of rupees one lakh for Akash project center. Further, the Institute was selected as one of the training centers by Wipro for conducting faculty development program 'Mission-10X'. The Institute is also an institutional member of "Oracle Academy Computer Science Club". Apart from these, the Institute has been identified as one of the mentoring Institutes by Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) to carry out "Rashtriya Avishkar Abhiyan" by MHRD.

Under the Industry Institute Interaction program the Department of Mechanical and Electrical Engineering have conducted 'Advanced Certificate Course in Mechanical Engineering' during 2007-2009 at Sunflag Iron and Steel Co. Ltd., Bhandara. The Institute had imparted training on 'Advanced Training in Power Plant Engineering and Infrastructure Management' during 2009-2010 for trainee Engineers of Sunil Hi-Tech Engineering Pvt. Ltd., Nagpur.

During 2006-2011, Institute had academic Memorandum of Understanding (MoU) with the University of West of England, Bristol. Alumni of the Institute have occupied prestigious positions in the organizations of national and international repute in India and abroad.

### **Concluding Remarks :**

The Institute has well framed administrative set up according to the norm of regulatory bodies like RTMNU, AICTE and Government of Maharashtra. The Governing Body frames the policies of the Institute which are implemented by the Principal through the Dean, Associate Dean, and Head of the departments. Various stakeholders provide feedback on the governance of the Institute and is communicated to the managing society through the Principal. The Institute follows the best practices for the benefit of student which includes 100% syllabus coverage, incentives to the students for the regularity in attending the classes. The student and faculty members are encouraged to participate in the research activities and suitably rewarded for the same during the annual day celebration. To encourage the students regarding the co-curricular and extracurricular activities various clubs and association are formed. The Institute has dedicated Training and Placement cell to look after training and placement activities of the Institute. There are committees for the redressal of grievances of the employees and students. The Institute also has active alumni charter. The faculty interacts with students and the industry regularly and communicates the feedback to the University bodies for up gradation of syllabus.

Proactive and generous management, dedicated and committed staff, hardworking students and supportive parents have contributed to the growth of the Institute over last three decades. Next goal of the Institute is to obtain autonomy which would give academic flexibility to attain student centric learning.

NAAC

## 6.ANNEXURE

### 1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.2	<p>Number of certificate/diploma program introduced during the last five years</p> <p><b>1.1.2.1. Number of certificate/diploma programs introduced year-wise during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>11</td> <td>04</td> <td>01</td> <td>09</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>11</td> <td>04</td> <td>01</td> <td>09</td> </tr> </tbody> </table>	2016-17	2015-16	2014-15	2013-14	2012-13	17	11	04	01	09	2016-17	2015-16	2014-15	2013-14	2012-13	17	11	04	01	09
2016-17	2015-16	2014-15	2013-14	2012-13																	
17	11	04	01	09																	
2016-17	2015-16	2014-15	2013-14	2012-13																	
17	11	04	01	09																	
1.2.1	<p>Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</p> <p>1.2.1.1. How many new courses are introduced within the last five years            Answer before DVV Verification : 174            Answer after DVV Verification: 174</p>																				
2.2.3	<p>Percentage of differently abled students (Divyangjan) on rolls</p> <p>2.2.3.1. Number of differently abled students on rolls            Answer before DVV Verification : 01            Answer after DVV Verification: 01</p>																				
2.3.3	<p>Ratio of students to mentor for academic and stress related issues</p> <p>2.3.3.1. Number of mentors            Answer before DVV Verification : 144            Answer after DVV Verification: 145</p>																				
3.3.5	<p>Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years</p> <p>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            Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>21</td> <td>22</td> <td>38</td> <td>30</td> <td>46</td> </tr> </tbody> </table>	2016-17	2015-16	2014-15	2013-14	2012-13	21	22	38	30	46										
2016-17	2015-16	2014-15	2013-14	2012-13																	
21	22	38	30	46																	

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
21	22	38	30	46

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

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. year-wise during the last five years

Answer before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
790	2100	1890	1070	804

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
790	2100	1890	1070	1269

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)

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 before DVV Verification:

2016-17	2015-16	2014-15	2013-14	2012-13
08	09	06	06	05

Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
01	04	01	03	03

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

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

Answer before DVV Verification:

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

16.19149	14.51522	17.17834	20.96022	27.05199
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Answer After DVV Verification :

2016-17	2015-16	2014-15	2013-14	2012-13
16.19149	14.51522	17.17834	20.96022	27.05199

4.2.6	<p>Percentage per day usage of library by teachers and students</p> <p>4.2.6.1. Average number of teachers and students using library per day over last one year          Answer before DVV Verification : 270          Answer after DVV Verification: 120</p>																				
5.3.3	<p>Average number of sports and cultural activities/ competitions organised at the institution level per year</p> <p>5.3.3.1. Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years          Answer before DVV Verification:</p> <table border="1"> <tr> <td>2016-17</td> <td>2015-16</td> <td>2014-15</td> <td>2013-14</td> <td>2012-13</td> </tr> <tr> <td>19</td> <td>20</td> <td>21</td> <td>17</td> <td>17</td> </tr> </table> <p>Answer After DVV Verification :</p> <table border="1"> <tr> <td>2016-17</td> <td>2015-16</td> <td>2014-15</td> <td>2013-14</td> <td>2012-13</td> </tr> <tr> <td>19</td> <td>20</td> <td>22</td> <td>17</td> <td>17</td> </tr> </table>	2016-17	2015-16	2014-15	2013-14	2012-13	19	20	21	17	17	2016-17	2015-16	2014-15	2013-14	2012-13	19	20	22	17	17
2016-17	2015-16	2014-15	2013-14	2012-13																	
19	20	21	17	17																	
2016-17	2015-16	2014-15	2013-14	2012-13																	
19	20	22	17	17																	

## 2.Extended Profile Deviations

ID	Extended Questions
1.4	<p>Total experience of full-time teachers            Answer before DVV Verification : 1500 years            Answer after DVV Verification : 1505 years</p>