



# **SELF STUDY REPORT**

**FOR**

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

## **INDERPRASTHA ENGINEERING COLLEGE**

**SITE - IV, 63, SAHIBABAD INDUSTRIAL AREA, SURYANAGAR FLYOVER  
ROAD, SAHIBABAD, GHAZIABAD, UTTAR PRADESH - 201010**

**201010**

**[www.ipec.org.in](http://www.ipec.org.in)**

**Submitted To**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

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# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

**Inderprastha Engineering College (IPEC)** was set up as a self financed institution to cater the demands of technical education in the NCR region of UP. IPEC is approved by **AICTE** and affiliated to **Dr. A.P.J. Abdul Kalam Technical University (Formerly Uttar Pradesh Technical University), Lucknow.**

**IPEC** the emblem of excellence, an **ISO 9001:2015** certified institute is ranked amongst top 10 colleges of Dr.APJAKTU. It offers undergraduate programs (B.Tech. degree) in six disciplines of engineering i.e. Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Information Technology, Mechanical Engineering and Civil Engineering. IPEC also includes postgraduate programs (M.Tech.) in three disciplines i.e. ECE(specialization:VLSI Design), ME(specialization:Production Engineering), Computer Science & Engineering to fulfill the varied aspirations of its strength of over 3600 learners.

Highly qualified, experienced and dedicated faculty members nurture and empower the students to become industry centric, competent, ethical and humane professionals in various fields of engineering. Nearly 100% result is the outcome of teaching and research methodology focused on emerging technologies and business processes. Time to time guest lectures by eminent professors & industry personels, Industrial visits, Personality Development Classes, National level Seminars/Workshops/Conferences and practical exposure to authenticate theoretical knowledge provides students a basis to be innovative, entrepreneurial and assured future citizens. Besides this different Technical and Non-technical Intra Collegiate Student Forums are the initiatives of student's inherent potential providing wings to their imagination in the direction of enhancing their engineering skills, leadership qualities and creative thinking.

Today the Alumni of **IPEC** work with World class companies. Training and Placement Cell of the institute is an interface between students and Industry across the country and develops employable professionals through a comprehensive training program.

The lush green sprawling campus of **IPEC** spread over 7.81 Acres is located close to National Capital in the midst of Sahibabad Industrial Area. The distance of only 2 Km from Anand Vihar ISBT and 500m from Vaishali Metro Station makes it approachable for the aspiring engineers in NCR.

**IPEC** continues to adopt innovations in academics and administration to emerge as a benchmark setter in engineering education as per the vision of the institute.

### **Vision**

*"National Leadership in Human Resource Development, Excellence in Education and Impacting Society Through Globally Competent Technologies"*

### **Mission**

- *Be the most preferred choice of Student, Faculty and Industry.*
- *Be a National Level Technical Institution fostering Teaching, Research, Extension Education, Innovation, Leadership and Entrepreneurship Spirit.*

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

### **Institutional Strength**

1. UG Programs are accredited by National Board of Accreditation (NBA) in year 2008, 2012 & 2017
2. Strategically located in the heart of National Capital Region (NCR).
3. Cooperative & technically qualified management, Good infrastructure & Healthy Environment.
4. Open mindedness in accepting, experimenting and implementing new technologies for betterment of the Institute.
5. Qualified, committed and passionate faculty with very good faculty retention.
6. Consistently very good enrolment ratio.
7. Graduation rate with good placements and excellent personality development training programs.
8. Consistently very good results and achieved 8th Rank from Dr. A.P.J. Abdul Kalam Technical University in year 2017.
9. Industry Collaborated Centers of Excellence.
10. Financial incentives for paper publications, innovative projects and academic excellence.
11. Faculty Members of the institute have filed three patents in last three years.

### **Institutional Weakness**

1. Lack of funded projects and patents.
2. Cadre ratio need to be improved with more PhDs.
3. Limited number of PG programs in Engineering and Technology.
4. Quality publications & research efforts need to be strengthened.
5. Needs to improve placements in core branches.
6. Lack of student participation at National and International level sports and cultural activities.
7. Extension and outreach Programmes needs to be conducted especially in collaboration with NSS, NCC, Red Cross and YRC.

### **Institutional Opportunity**

1. Opportunity to become an autonomous institute enabling design of curriculum as per industry requirements.
2. Students may have more start-ups in the incubation facility.
3. Development in Research Activities through AKTU affiliated Research centers.
4. Introduction of lecture Capture Solution will enhance deep learning resulting in good placements in the future.
5. Interactions through Industry Academia Board will widen the opportunities for students internship, faculty exchange and collaborative work.

6. Alumni pool of the institution serving in the country and abroad widen the opportunity of collaboration and network building.
7. Inculcating the culture of entrepreneurship in youth through technology transfer.

### **Institutional Challenge**

1. Long term sustainability without compromising on standards due to horizontal growth of Institution and competitions from nearby colleges and universities.
2. Inculcation of research culture among under graduates.
3. Attracting and retaining faculty of quality and repute.
4. International students and faculty exchange programs with foreign universities.
5. To provide consultancy services to the industry.
6. To figure in the NIRF ranking.
7. More Patents to be filed by the Institution in future.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

The annual affiliation is granted to the Institute by Dr. A.P.J. Abdul Kalam Technical University, Lucknow, which has jurisdiction to affiliate the Engineering Colleges all over the State of Uttar Pradesh. The University started in the year 2000 and at present about 600 institutions are affiliated to it. The university has been regularly updating its curriculum once in every four years. In the last three years, University has changed the curriculum two times in three years i.e. 2015 and 2018 respectively and implemented CBCS. The University has Board of Studies for each of the Engineering Programs, which consists of senior Faculty members, external academicians and Industry experts from concerned specialization that prepares the draft syllabus, reviews it after getting feedback from all the stakeholders. The recommended syllabus from all programs are reviewed by the joint Board of Studies and later notified to the Colleges after approval by the Academic council and the Executive Council of the University. As many stakeholders are involved in this process, it almost ensures that the curriculum released will be meeting the Industry expectation at that time. However, sometimes in some programs, due to rapid technological advances certain gaps may exist which need to be addressed from time to time. Academic flexibility and bridging the gap between curriculum and industry is achieved by conducting certificate courses, seminars and tie-ups through MOU's with leading industries. The institute encourages self-employability by conducting Entrepreneurship Development Programmes. The institute caters to the needs of slow learners through extra inputs in terms of remedial classes. Social awareness and community service is inculcated in the students through various extension activities.

The institute has transformed the university curriculum in to OUTCOME BASED EDUCATION. The curriculum implementation and monitoring processes are developed and have been formally documented. The curriculum has incorporated the CBCS & offered electives in all six undergraduate & three postgraduate programmes offered by the institute. The institute regularly conducts the feedback on outcomes & teaching learning processes. The outcomes of feed back are taken for corrective measures.

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

The teaching-learning process is given utmost importance in the Institute as it is a deciding factor on the student's career. Institute practices blend of conventional teaching and student centered learning practices such as Project Based Learning (PBL) and Active Learning. Syllabus completion status is monitored regularly through the syllabus coverage report. Tests and tutorials are conducted on a regular basis to ensure that the students grasp the concepts being delivered in the classrooms and laboratory sessions. The faculty provides a highly conducive teaching-learning environment that includes traditional teaching, workshops, technical seminars, group projects, monthly distinguished lectures, industry visits, quizzes, assignments, entrepreneurial trainings, group discussions, technical fests, project exhibitions and so on. Students are also trained to use online resources to supplement the classroom learning. It is important to note that faculty use various innovative teaching learning techniques to disseminate knowledge that arouse curiosity in students. Online feedback is taken from all the students for all the courses in the standard format as per the calendar of events to identify the strength & areas for improvement so that it helps the faculty to implement the suggestions given by the students in the remaining part of the semester. Further, class committee meeting is scheduled on monthly basis to discuss the problem faced by the students with HOD to further improve the teaching learning process and solve the issues faced by the students time to time. Three Internal Assessments for 2nd year to 4th year and in addition to that in first year two round of weekly test are conducted for each theory course as per calendar of events in a fair & transparent manner. The students are informed about the portions well in advance; each internal assessment is conducted for specified marks. The subject teacher evaluates the answer booklet within one week from the date of conduct of test. The evaluated answer booklets are shown to the students and any error is corrected on spot.

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

The Institute has taken a proactive measure to increase the research and innovation in the institute. Head of department and EDC in consultation with Dean and Director is empowered to conduct all the R & D activities of the Institution. This is done to motivate faculty to get the sponsored projects for both students & faculty members from funding agencies. Various conferences, guest lectures, workshops, summits, celebrity chats are organized throughout the year, through which the students are exposed to the outside world work ethics and all the recent developments and innovations. The institution encourages the participation of students in competitions conducted by various professional societies and clubs formed at department level as well as at institute level. Students are encouraged to develop such projects that can get funding from different funding agencies like MSME etc. Till date institute has received a grant of total 76 lakhs from different funding agencies for student projects. One of our MSME funded projects in which the cooking gas has been generated from the Sewage was appraised by the Prime Minister of India in his speech on world environment day, 2018 and got huge media coverage throughout the India. . Many of our students are working on such type of innovative projects. The Institution has arranged a number of Industrial Visits for the budding engineers to various industries of relevance. The institute organizes the Industry oriented programmes and certificate courses for the students to excel in their chosen field. Memorandum of Understanding (MoU) is tied up with reputed Industries to bring them strategically closer. EDC regularly conducts Entrepreneurship Development Programme to develop Entrepreneurship skill among student. The institution has developed many products toward its contribution to society by innovation. Some of these developed products are E-Rickshaw battery charger, Sewage gas system and smart band for visually impaired persons. The institution has organized a number of workshops/seminars on IPR and Industry academia Innovative practices. Institute has organized **2nd International Conference on Modern Mathematical Methods and High Performance Computing (M3HPCST-2018)** on January 04-06 ,2018. The participant from more than 22 countries has participated in this conference.

## **Infrastructure and Learning Resources**

Well-equipped infrastructure goes hand in hand for imparting quality education. The Institute has adequate number of class rooms, laboratories, workshops and tutorial rooms. Each class room is equipped with state-of-art facilities. The laboratories and workshop have modern equipment, machinery, computer hardware and software. Institution has also established some of the center of excellences in collaboration with the leading industry of relevant area. The institute has adequate seminar halls which are used for multiple activities such as seminars, workshops and conferences. Institute also has two auditorium one with a seating capacity of 200 capacity and another with a seating capacity of 400 which are used to conduct different co-curricular and extracurricular activities. The central library has excellent collection of book titles, reference books, journals, databases, magazines and a book bank facility. The central library is equipped with Integrated Learning Management Systems (ILMS), Web OPAC (Online Public Access Catalogue) and digital library facility where students can access different e journals and online resources . It has a reading hall with a seating capacity of over 150 students. Institute always tries to take measures to reduce the pollution level so, it has developed a lush green campus with plenty of plants. Adequate hostel facility for girls and boys is provided on the campus. Various sports facilities are provided to the students like sport grounds for football, cricket, basketball, volleyball, badminton, billiards etc. along with well-equipped gymnasium for boys and girls. Institution has a state of art cafeteria with a sitting capacity of 200 students at a time. The institute also has an central computing facility with 150 computer.

## **Student Support and Progression**

The Institute has a very good student support & progression system that include welfare measures, career guidance and training, Alumni engagement for holistic development of every student etc.

The welfare measures include insurance coverage for all the students through university, facilitating the sanction of scholarships to most of the students from government agencies and timely distribution to the students and timely grievance redressal mechanism. The Institute also identifies meritorious students every year and supports them with a scholarship. Institute also has provision for the rank holders of the University merit list. If any student secures any position in university merit list, his full tuition fee is waved off. The Institution has a well-defined student mentoring system. The main objective of mentoring is to help each student in taking right decisions for their academic and personal growth. Two faculty members are assigned as mentor to each class to monitor and record their progress regularly. Class committee meeting is a platform where students can discuss issues faced by them. Slow learners issue is dealt with remedial classes. . For stress related issues, institution has appointed a counselor who helps the students in case of any stress related issue.

The Training & Placement (T&P) cell of the institute provides career guidance and organizes campus recruitment drives for the students. The T&P cell prepares the students for placement and overall development activities through various initiatives such as online assessment tests, soft skills development programmes, Addon Courses, Group Discussions and Personal Counseling. The T & P Cell arranges special coaching for Soft Skills in collaboration with different agencies of relevant expertise.

Alumni, through Alumni association are invited to address students and to guide them on career options, provide industry insights and to impart knowledge on the current trends . Alumni are also the part of the institution through their representation in different committees .

The institute has societies and clubs both at the college level & at the department level to impart necessary

skills and provide an opportunity to exhibit the talent.

Development of Entrepreneurial skills is encouraged in the students through Entrepreneurship Development Cell (EDC).

### **Governance, Leadership and Management**

The Institute practices transparent and participative governance at all levels. All the policies in the matter of planning human resources, recruitment, training, performance appraisal and financial management are carried out systematically considering the overall interest of the Institute and the stakeholders.

The Institute has a well-defined administrative structure for effective governance and for building the organizational culture, which is as follows: .

1. Governing council
2. Director
3. Dean Academic
4. Council of HODs

The institute functions with decentralized administration that has complete transparency in the decision making process. The Governing council has delegated powers to the Director to conduct the Academics, institutional development, curricular and extra-curricular activities. The Director in turn, has delegated certain powers to the HODs and office staff. The council of Dean & HODs with Director as its chairman meets on fortnightly basis to discuss academic & administrative issues and to take appropriate decisions from time to time. The council of HODs has constituted many committees to decentralize the activities and empower the faculty for smooth functioning of the Institute.

The service rules are published keeping in view the requirement of different statutory and regulatory bodies , which consists all the service rules and code of conduct.

Institute has adopted many welfare measures for teaching and nonteaching staff which includes all the statutory benefits, Medical facility, sponsorship for attending seminar, workshop and FDP with registration fees and duty leave. Besides this institute also organizes many programs for the overall development of teaching and non teaching staff.

The financial management of the Institute is transparent and follows the established norms with respect to resource mobilization, allocation of budget and utilization. The income and expenditure are audited on regular basis.

IQAC plays a major role in inculcating quality culture in the Institute which is functioning effectively and constantly improving the quality level of the institute.

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

In line with its vision, the Institute proactively evaluates the various initiatives that are taken from time to time and improves on them to produce graduates who are not only technically competent but have values embedded.

The Institute organizes a number of socially relevant activities like gender equity, safety, cleanliness drives etc. The Institute has taken measures to implement a solar power plant and a sewage water treatment plant in the campus as it believes that a proper eco system needs to be created by practice. In addition, the campus is made differently abled friendly by providing all the necessary facilities.

The Institute believes that the best practices will have a larger impact on the students. It has a number of best practices that have become the culture of the organization and they are:

The first best practice of the institute is weekly test system. The prime objective of the weekly test system is to enhance the student performance by timely recognizing the weak areas so that the competent authority will take the corrective measure to fill the gap.

The second best practice is Employability skill development Program which aims at enhancing the Knowledge, skill and attitude of students. It is in line with the vision of the institute. Employability skill development Program is run by the training & Placement cell of the institute. Training & Placement (T&P) Cell provides excellent career guidance and placement opportunity to students. The mission of the T&P Cell is to help students clarify their educational & career goals, acquire employment-seeking skills and ultimately attain desired employment. Under this program institute has association with expert assessment agencies to identify improvement areas of the students and impart training accordingly.

The distinctive performance of the institute is the teaching-learning process as the Institute is well known in the region for this. The salient features of teaching learning are:

Excellent infrastructure, well qualified faculty, effective delivery, effective mentoring, action taken on feedback, Class committee meeting, effective utilization of online resources, special attention on advance and slow learners, fulfilling it's social responsibilities through innovation and extension activities.



## 2. PROFILE

### 2.1 BASIC INFORMATION

<b>Name and Address of the College</b>	
Name	INDERPRASTHA ENGINEERING COLLEGE
Address	Site - IV, 63, Sahibabad Industrial Area, Suryanagar Flyover Road, Sahibabad, Ghaziabad, Uttar Pradesh - 201010
City	GHAZIABAD
State	Uttar pradesh
Pin	201010
Website	<a href="http://www.ipec.org.in">www.ipec.org.in</a>

<b>Contacts for Communication</b>					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	B.C. Sharma	0120-4535057	9999980201	0120-453505 9	deanacademics@ip ec.org.in
Professor	V.K. Singh	0120-4535054	9971664484	0120-453505 3	drvinaiksingh@ipe c.org.in

<b>Status of the Institution</b>	
Institution Status	Private and Self Financing

<b>Type of Institution</b>	
By Gender	Co-education
By Shift	Regular

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

<b>Establishment Details</b>	
Date of establishment of the college	27-07-2000

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

State	University name	Document
Uttar pradesh	Uttar Pradesh Technical 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>	10-04-2018	12	

**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	Site - IV, 63, Sahibabad Industrial Area, Suryanagar Flyover Road, Sahibabad, Ghaziabad, Uttar Pradesh - 201010	Urban	7.81	32657

## **2.2 ACADEMIC INFORMATION**

NAAC

<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	BTech,Computer Science And Engineering	48	Intermediate	English	240	240
UG	BTech,Electronics And Communication Engineering	48	Intermediate	English	240	125
UG	BTech,Electrical And Electronics Engineering	48	Intermediate	English	60	30
UG	BTech,Mechanical Engineering	48	Intermediate	English	120	62
UG	BTech,Information Technology	48	Intermediate	English	120	96
UG	BTech,Civil Engineering	48	Intermediate	English	120	43
PG	Mtech,Computer Science And Engineering	24	B.Tech	English	18	0
PG	Mtech,Electronics And Communication Engineering	24	B.Tech	English	18	0
PG	Mtech,Mechanical Engineering	24	B.Tech	English	18	0

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

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	29				58				174			
Recruited	8	8	0	16	10	22	0	32	82	92	0	174
Yet to Recruit	13				26				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						117
Recruited	100		17		0	117
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				50
Recruited	46	4	0	50
Yet to Recruit				0

#### Qualification Details of the Teaching Staff

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	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.	8	8	0	10	8	0	10	17	0	61
M.Phil.	0	0	0	0	0	0	2	3	0	5
PG	0	0	0	0	0	0	68	86	0	154

<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	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>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	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>Total</b>
	0	0	0	0	0

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	336	136	0	0	472
	Female	90	34	0	0	124
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	0	0	0	0	0
	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	6	30	51	56
	Female	2	4	9	8
	Others	0	0	0	0
ST	Male	1	1	0	1
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	115	137	186	185
	Female	24	19	37	39
	Others	0	0	0	0
General	Male	346	489	456	488
	Female	96	145	137	161
	Others	0	0	0	0
Others	Male	4	7	10	17
	Female	2	2	1	1
	Others	0	0	0	0
Total		596	834	887	956



### 3. Extended Profile

#### 3.1 Program

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

Response: 9

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
9	9	9	9	9

#### 3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
3173	3506	3547	3422	3027

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

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

2017-18	2016-17	2015-16	2014-15	2013-14
477	507	507	507	507

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

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

2017-18	2016-17	2015-16	2014-15	2013-14
897	902	824	710	513

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

### 3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
222	233	240	210	202

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

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

2017-18	2016-17	2015-16	2014-15	2013-14
261	265	257	239	209

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

### 3.4 Institution

#### Total number of classrooms and seminar halls

**Response: 70**

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

2017-18	2016-17	2015-16	2014-15	2013-14
1677.48	1839.24	1920.75	1724.70	1558.51

#### Number of computers

**Response: 817**

## 4. Quality Indicator Framework(QIF)

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### Criterion 1 - Curricular Aspects

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#### 1.1 Curricular Planning and Implementation

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

###### Response:

The Institution has developed extensive action plan and practices it for effective implementation of the curriculum through the following measures. Academic calendar is prepared to include internal Assessment test schedule, university examination schedule and the institution level activities:

- 1.An Academic Calendar followed by Academic Activity Calendar is prepared in each semester in alignment with Academic Calendar of the university by the Academic Committee of the institute and is strictly followed.
- 2.Subject choice is taken from each faculty member of the department.
- 3.Subject allotment to faculty is based on skill matrix, experience, area of specialization and performance in previous years.
- 4.Timetable in-charge of each department prepares the timetable as per the university guidelines for the number of credit hours for each subject prior to the commencement of the semester. After that faculty-wise detailed time table is also prepared.
- 5.Lecture Plan and course file are prepared beforehand as per the fixed parameters required to capture the execution details and to analyze the gaps (if any).
- 6.Assigning the teaching faculty for mentoring students on academic as well as personal issues to a better learning atmosphere
- 7.Emphasis is given to use modern teaching aids in course delivery.
- 8.Student's attendance is monitored regularly through ERP software.
- 9.As a part of continuous evaluation, institution conducts three internal tests first two of 2 hour duration and another one of 3 hour duration for 2nd year to final year. For first year, institute is following the methodology of internal test of two subjects on every Monday.
- 10.Evaluated answer booklet are shown to the students and marks are uploaded on the college ERP.
- 11.Student feedback is taken to review the performance of the faculty members.
- 12.Identification of weak students is done on the basis of their performance in sessional exams and to improve their performance, remedial classes are conducted for them. These remedial actions include extra classes for such students, practice session on numerical problems, providing the question bank with solution etc.
- 13.Parents are informed about the performance and attendance of their ward at regular interval by the department.
- 14.Opportunities are provided to the students by creating a stimulating environment to strengthen their technical knowledge as well as honing their soft skills.
- 15.NPTEL Modules and spoken tutorials are used to enhance their technical knowledge.
- 16.Technical lectures by personnel from academic institutions, research organizations and industries are regularly held.
- 17.Lab experiments are conducted in accordance with the university curriculum within and beyond syllabus.

18. At the end of each semester one or two quizzes with internal viva takes place for the final evaluation of the lab internal marks.
19. Teachers can strengthen their knowledge in the subjects listed in the curriculum during summer and winter vacation period by attending the FDPs on their area of relevance.
20. Industrial visits are encouraged to provide real time exposure to the students.
21. Institutes provide teaching aids such as OHP/LCD Projectors, free WiFi, NPTEL access for effective curriculum delivery.

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:** 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Details of the certificate/Diploma programs	<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:** 14.45

#### 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

2017-18	2016-17	2015-16	2014-15	2013-14
5	1	8	8	10

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

<b>1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</b>	
<b>Response: 0</b>	
1.2.1.1 How many new courses are introduced within the last five years	
File Description	Document
Details of the new courses introduced	<a href="#">View Document</a>

<b>1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented</b>	
<b>Response: 100</b>	
1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.	
Response: 9	
File Description	Document
Name of the programs in which CBCS is implemented	<a href="#">View Document</a>
Minutes of relevant Academic Council/BOS meetings.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

<b>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</b>				
<b>Response: 42.17</b>				
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				
2017-18	2016-17	2015-16	2014-15	2013-14
3173	3506	179	105	83

<b>File Description</b>	<b>Document</b>
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:

The institution is adopting Dr APJ Abdul Kalam Technical University curriculum. Also the institution creates awareness among the students by organizing different programs in which the resource persons are invited to deliver lectures on cross cutting issues. The cross cutting issues like gender, environment education, human sustainability values and professional environment ethics are included into the curriculum as per the university syllabus as well as by organizing seminars, workshops, discussions, Skits for the following issues:

#### Gender:-

1. Equal opportunities are given to both the genders in terms of admissions, employment, training programmes, sports activities etc., that the so gender issues do not arise. We have 60 percent female faculty members in teaching staff. Girls and boys participate in various co-curricular activities such as paper presentations, organization of paper contests, group discussions and technical quiz programmes. Both boys and girls are made members of various clubs associated with academic, co-curricular, extracurricular activities and placement activities.
2. Women Grievances cell exists in the institute to deal with the cases based on the gender.

#### Environment & Sustainability:-

As per AKTU norms, Students have a prescribed compulsory course on Environment and Ecology. Students are also encouraged to participate in activities like tree plantation and Swachh Bharat. The institute has implemented rainwater harvesting, which has saved significant amount of water expenses. The Reverse Osmosis Plant installed in the college campus caters the drinking water needs of all the Students, Teachers, supporting Staff and the Visitors. Solar power plant is installed in the campus which generates near about twenty percent power of the total requirement.

#### Human Values and Professional Ethics:-

The curriculum of university includes the course on “Universal Human Values and Professional Ethics” in B.Tech – II Year. This course is intended to help the students appreciate the essential complementarity between 'VALUES' and 'SKILLS' to ensure sustained happiness and prosperity, which are the core

aspirations of all human beings. Also, this course facilitates the development of a Holistic perspective among students towards life and profession as well as towards happiness and prosperity based on a correct understanding of the Human reality and the rest of Existence. Such a holistic perspective forms the basis of Universal Human Values and movement towards value -based living in a natural way.

Special lectures are also arranged to create awareness on these issues. As per AICTE & AKTU norms, an Anti- Ragging Committee has been constituted to handle the issues pertaining to ragging. In addition the undertaking from the parents and students is taken during the admission process which is related to the anti-ragging act and making the campus ragging free. As a result,till date no case for ragging is reported.

**The lists of core courses are:**

1. Geoenvironmental
2. Environmental Engineering
3. Universal Human Values & Professional Ethics
4. Environment & Ecology
5. Water Resources Engg
6. Environmental Geo-technology
7. Industrial Pollution Control & Env. Audit
8. Engineering Hydrology
9. Water Resources Systems
10. River Engineering
11. Groundwater Management
12. Environmental Management for Industries

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:** 33

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

**Response:** 33

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>

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

**Response:** 28.3

#### 1.3.3.1 Number of students undertaking field projects or internships

Response: 898

File Description	Document
List of students enrolled	<a href="#">View Document</a>
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>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<a href="#">View Document</a>
URL for stakeholder feedback report	<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

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

NAAC

## 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:** 31.79

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

2017-18	2016-17	2015-16	2014-15	2013-14
1179	1264	1118	967	786

#### File Description

#### Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

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

**Response:** 84.9

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

2017-18	2016-17	2015-16	2014-15	2013-14
596	834	887	971	979

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

2017-18	2016-17	2015-16	2014-15	2013-14
954	1014	1014	1014	1014

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

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

**Response:** 48.73

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

2017-18	2016-17	2015-16	2014-15	2013-14
148	191	283	291	313

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:**

Academic session starts with 3-week long induction program for the students entering the institution, right at the start. Normal classes start only after the induction program is over. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature. It includes:-

1. Introductory sessions conducted by Director/Dean academic & faculty members (who are in-charge of various extra-curricular and professional activities taking place within college campus)
2. Talks by the Training and Placement officer.
3. Special classes for English, Physics and Mathematics.

**Students are identified as Slow/advanced Learner by following ways :-**

1. In the beginning, students are identified by Active participation in Induction Program, rank in UPSEE and marks obtained in 10+2 examination.
2. Performance in Internal Assessment i.e. Class Test, Sessional Exam, Assignments, Lab & practical records, Attendance, quiz etc. We conduct three sessional exam in each semester for all subjects. Last sessional exam i.e. PUT (Pre-University Test) is completely based on University pattern. Assignments/Quiz is given to students at regular interval.
3. Performance in External Examination i.e. Theory End Semester Examination and Practical End Semester Examination. Passing marks for theory and practical subjects are 30% and 50%

respectively.

4. Performance in Technical Events, Project work, Curricular and Extra Co-Curricular activities. We have Expressions-Students Activity Cell (E-SAC) which is divided into many segments like MEDHA (literary activities), NIVEDHA (cultural activities), SPARDHA (sports activities) and VIVIDHA (Technical activities) for dynamic learning and competitions.

#### **Programs for Slow Learners:-**

1. Tutorials / remedial classes are conducted for these students to clarify doubts, re-explain the critical topics for an improved performance.
2. Poor performance due to frequent absenteeism is dealt by sending SMS and letters to the parents of such students.
3. To help the students overcome their psychological problems and achieve their goals successfully, Dr. Vidhi Gupta, an experienced psychologist has been appointed for Counselling sessions.
4. Mentoring system is implemented in which two class counselors are assigned for each sections. They look into details regarding the academic performance, completion of academic requirements, health follow-ups and grievances, if any. They also interact with the parents on issues related to academics, and progress of students.

#### **Programs for Advanced Learners;-**

1. They are given inputs on reference skills, research methodology and research design. They are intellectually stimulated with various advanced projects, challenging assignment and tasks for their advancement.
2. They are encouraged to present/write research articles and assist in preparation of college magazine.
3. They are usually made the class representatives for proactive leadership through which classroom dynamics are positively influenced.
4. They are given the lead to plan and organize departmental seminars/conferences giving them an opportunity to interface with the academia/industry experts.
5. Meritorious students are financially rewarded with a cash prize starting from Rs 3000/- to full fee waiver. Further, they are benefitted by various schemes offered by management which include financial support.

<b>File Description</b>	<b>Document</b>
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:** 14.29

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

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

**Response:** 0.03

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

Response: 1

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:**

At IPEC, all the efforts are put in to make learning a pleasure rather than a burden. To achieve this objective team of our dedicated faculty members and support staff leaves no stone unturned to implement innovative learning pedagogy with focus on the following areas:-

- 1.Outcome based learning approach
- 2.Inculcate a culture of Research and innovation with focus on hands-on-learning
- 3.Exposure to diverse learning platform through NPTEL, Spoken Tutorial and Virtual Labs
- 4.Encourage students to excel in co-curricular activities.
- 5.Ensuring adequate industrial, R&D and academic exposure.

#### **Experiential Learning:-**

- 1.All the class rooms and labs are well equipped with ICT.
- 2.The Institution provides sufficient teaching aid like OHP/LCD projectors, State-of-art, Language Lab, R&D Lab, Virtual Labs, Workshops and Seminar for effective curriculum delivery
- 3.Students are encouraged to build small projects and then integrate them to make complex ones. We have also established E-yantra Lab to train students on Robotics and Microcontroller programming.
- 4.Experiential learning through Field Trip, Industrial visits and internship.
- 5.Workshop and training on software/tools like STAAD-Pro, Geo-5, MX-Roads, Primavera, Watergems, Revit, MATLAB, CADANCE, MS Projects, Robotics, HADOOP and BIG DATA, Cloud Computing, IOT, ANDRIOD, Microsoft Azure etc.

#### **Participative Learning:-**

1. For collaborative learning, participation of students in seminars, workshops, quiz competitions are encouraged.
  2. UDBHAV, an annual Techno cultural fiesta, aimed to hone the skills with an effort to search the finest technocrats along with the fun and frolic.
  3. Student Chapter of ISHRAE (The Indian Society of Heating, Refrigerating and Air Conditioning Engineers) has been initiated and various events like technical talks, workshops and quiz have been organized under its flagship.
  4. Industrial tie-ups with Infosys Campus Connect, Sopra Steria, EMC2 , Microsoft IT Academy Program, NASSCOM, IBM NISWA etc. to bridge the gap between industry and academia.
  5. Departmental societies to nurture technical growth of students through various technical events and expert lectures.
- **Trinity**:- It conducts various events like Hackathon etc and workshops aiming to clear the fundamentals of programming languages and course curriculum in the best way possible.
  - **ACM**:- Operated for educational and scientific purposes to promote an increased knowledge and interest in the contributions of science, design, development, management and applications of modern computing.
  - **Genisis**:- The society organizes a number of events including programming contests like, debug the bug, debugging challenge, talks by renowned speakers, workshops etc., which give the students an exposure to the competitive computing world.
  - **CSI**:- It is working on four special interest groups (SIGs) Java, Android, Robotic and Web.
  - **Gentronix**: It organizes a number of events related to Electronics & Communication Engineering like project exhibition/competitions, debates, technical guest lectures etc.

### Problem Solving Methodologies

1. Define the problem.
2. Create a mathematical model.
3. Develop a computational method for solving the problem.
4. Implement the computational method.
5. Test and assess the solution.

#### **Example:-**

Students of Civil Engineering made the longest paper bridge name Santulan Setu having an overall span/length of 14.3 m, the cable-stayed bridge withstood weight of approx. 1000 kg. This achievement has been recorded in “**Limca Book of Record**”

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for 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:** 100

#### 2.3.2.1 Number of teachers using ICT

Response: 222

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:** 25.59

#### 2.3.3.1 Number of mentors

Response: 124

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

### 2.3.4 Innovation and creativity in teaching-learning

**Response:**

Innovations & creativity in teaching-learning process helps students to have a deeper understanding of content and enhances their interest & engagement in education. It is important that faculty use various techniques to disseminate knowledge that arouse curiosity in students.

#### **Innovation & creativity in teaching-learning process:**

- 1. Outcome based learning approach:** The institute strictly follow the outcome based model of education. The 3 programmes of the institute have been accredited by the NBA under the OBE model. The contents, delivery, activities, and assessments are all aligned to facilitate students to attain specific intended learning outcomes.
- 2. Use of ICT and other appropriate methods:** In addition to traditional teaching-learning methodologies, the faculty members adopt group discussions, relevant videos, seminars, mini projects, case studies, PPTs, real time examples, simulations, quizzes, depending on the course and the situation to create the best learning environment for the students.

3. **Exposure to diverse learning platforms through NPTEL and Spoken Tutorial:** IPEC has a local chapter of NPTEL and Spoken Tutorial which provides learning resource to its students which includes free online courseware in the form of web courses and video lectures. These lectures utilize a multitude of facilities of the video medium such as chalk-and-talk, tablet writing, powerpoint, two and three dimensional animations, interactive codes, etc.
4. **Initiatives towards bridging the gap:** IPEC has taken this initiative to bridge the gap between industry and Academia. We have Industry-Academia Alliance with INFOSYS CAMPUS CONNECT, NASSCOM, SPORA STERIA, DELL EMC2, MICROSOFT IT ACADEMY PROGRAMME, SMALT & BERYL, ICT ACADEMY, NETCAMP PROGRAM for practical exposure along with theoretical knowledge to enhance the employability of students. New additions in the list are Centre of Excellence by Texas Instruments, Tech Adityas and Industrial training with Niswa Engineering Solutions.
5. **e-YANTRA Robotics and Embedded System Lab:** e-Yantra is an initiative to spread education in Embedded systems and Robotics by IIT Bombay sponsored by Ministry of Human Resource Development through the National Mission on Education through ICT (NMEICT). Our institute took initiative for e-Yantra lab setup in 2014, Under this program various workshops, seminars and hands on practical sessions on Robotics and Internet of things have been organized. Under e-Yantra, we have also signed MoU with **SAKROBOTIX RESEARCH CENTER** in the year 2018-19 to train students in the field of ROBOTICS from basic to advanced level. SakRobotix is an Indian Robotics Startup headquartered in Startup Centre, IIT Bhubaneswar that designs, develops, research, and sells Robots, Robotics DIY KIT, Robotics toys, and offers online robotics education. Various in-house robotics activities inside the campus are being organized on regular basis like robotics ideas & solutions, discussion through workshops, brainstorming sessions and seminars.
6. **Expressions-Students Activity Cell:** E-SAC is to treasure the wealth of extra-curricular skills owned by the native students. The cell is divided into many activities like Literary, Cultural, Sports and Technical for creating a healthy and positive ambience through dynamic learning programs and competitions. Bringing laurels and bright gems in the crown, students are getting a very nurturing exposure all around, university and state levels through E-SAC.

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

**Response:** 90.18



<b>File Description</b>	<b>Document</b>
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**

**Response:** 19.25

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

2017-18	2016-17	2015-16	2014-15	2013-14
60	49	40	35	30

<b>File Description</b>	<b>Document</b>
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:** 9.46

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

Response: 2101

<b>File Description</b>	<b>Document</b>
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:** 13.55

##### 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

2017-18	2016-17	2015-16	2014-15	2013-14
11	5	4	7	3

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:** 60.3

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

2017-18	2016-17	2015-16	2014-15	2013-14
158	162	161	136	126

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 evaluation of each course shall comprise of two parts: Internal and External or End-Semester Assessment. There are three internal tests conducted. The schedules of internal assessments are communicated to students and faculty in the beginning of the semester through institute academic calendar which is prepared based on the university academic calendar. The internal exam time table is displayed on the notice board and student portal a week in advance.

- Questions are framed, such that they adhere to AKTU standard. It follows the Bloom's Taxonomy and Outcome based Education in which COs are attained.
- There are 5 Course Outcomes(COs) for each subject. The first internal test question paper is prepared which covers two COs, second internal test covers another two COs, third internal test

covers all the COs.

- The subject coordinator in consultation with the subject teachers prepares question paper that covers equal number of questions from each unit, covering all the topics. Department internal exam coordinator, under the guidance of HOD, checks the standard of the question paper.
- Internal exam coordinator ensures smooth conduction of test and proper valuation of internal answer booklets.
- Faculty prepares the answer key and it is documented with a copy of sample question paper for the future reference and circulation among the students.
- The University has adopted Choice Based Credit System from 2016-17 in the curriculum.

The syllabi are unitized according to the semester system of teaching. In CBCS scheme, 20 marks are for internal test, 5 marks for assignments and 5 marks for attendance. In total 30 marks are for Internals and 70 marks are for externals. Third year and final year students are not under the umbrella of CBCS currently. For third year and final year, 50 marks are internal assessment and 100 marks are for externals. Internal marks are subdivided in three parts, 30 marks are for internal test, 10 marks for assignment and 10 marks for attendance.

Internal assessment tests and other measures taken to judge the performance of students is done fairly and in an effective manner. Students are allowed to go through the evaluated answer scripts of internal assessment tests and doubts regarding evaluation are cleared. Internal Test performance are intimated to the parents by the student portal in case of satisfactory performance. In Case the performance of the student is not satisfactory, then a letter is sent to the parents regarding the poor performance of their ward in the internal tests and even the parents are called in person by HOD to discuss the future course of action for improvement.

Whenever class tests, internal assessment tests are conducted the results of the student's performance are used by the faculty to identify slow and advanced learners. Students are encouraged to improve their performance in future by counseling. Nearly 30 students are entrusted to each faculty member to be mentors of the students. The mentors sort out the personal issues, academic and non-academic problems of their mentees and provide counseling and guidance.

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:**

**The process of Internal Assessment is followed as per the university guidelines. The process is transparent and is communicated to the stakeholders, students, faculty and parents by structured mechanisms.**

1. The internal assessment of sessional test schedules are prepared as per the university academic

- calendar and communicated to the students well in advance through college academic calendar.
2. The COE (at college level) conducts all the sessional tests as per the schedule. The invigilation duty chart for the faculty members and hall allotment for the students are notified well in advance before commencement of sessional test.
  3. Attendance of students gets uploaded on college ERP on the same day. Parents can also check the attendance of their ward at any time.
  4. Parents are informed telephonically and through speed post about the attendance and progress of their ward on monthly basis.
  5. The pattern, quality and correctness of the question papers prepared by the subject in-charge for the sessional test are verified by the Head of the Department. The internal documentation is maintained where the CO mapping to individual questions is mentioned in the question paper itself.
  6. Student who do not fulfill minimum required criteria of attendance as prescribed by the university are detained by the HOD from appearing in the sessional examination.
  7. To ensure proper conduct of sessional tests, flying squad and two invigilators (in each exam hall) are deputed.
  8. Evaluation is done by the subject teacher within three days from the date of examination.
  9. The evaluated answer scripts are distributed to the students for their verification and satisfaction. The corrected answer scripts are verified by Head of the Department to ensure the standard evaluation process.
  10. The marks obtained by the students in sessional test are displayed on the department notice board as well as on the student portal.
  11. Noting the values in observation and validating the theoretical aspects with practical knowledge, student must submit lab record regularly. Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record. For lab courses, the marks/grade scored by the student for each experiment is indicated in the observation / record. The independent learning, practical approach to the real-time applications are tested by viva voce for laboratory courses.
  12. For the quality of the projects, the evaluation is done by Project Review Committee (PRC) along with the project guides.
  13. The university end semester theory examination is conducted at a center other than this college. External practical examiner is appointed by the University for Practical Examination.
  14. At the end of each semester, Director of the institute verifies the internal marks for all the students.
  15. Meeting of Academic Committee is held on the last day of each month to assess all the academic activities i.e result analysis of sessional test, list of weak students for remedial classes, student feedback, course coverage report, attendance of students etc.

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

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

**Response:**

All the grievances related to Internal & External examinations are addressed in a transparent, time bound & efficient manner as explained below:

#### **At institute Level:**

- The performance of the students is informed to the students immediately after the completion of assessment tests through displaying the marks on class room notice board and academic monitoring system.
- There is provision to display the evaluated answer booklet of class test and sessional test to the student and get it signed by the student. In case of any discrepancy the student can get it corrected with the concerned faculty member on spot.
- The students can approach the head of the department with their grievance, in case it is not sorted out by the faculty concerned.
- Even if the student is not satisfied with the decision he can approach to the controller of examination/Dean Academic/Director of the Institute for the resolution of the grievance.

#### **At University Level:**

- University COE takes care of university evaluation grievances. The university settles the grievances using its own mechanism.
- Any malpractices during the examinations shall be booked following due process as per the AKTU guidelines. Students who get booked shall appear before an unfair means committee constituted by the AKTU. The aggrieved student is given an opportunity to present his case before the committee and the decision of the committee is final and binding and is conveyed to the student within the time schedule.
- After the announcement of results, a candidate who is not satisfied with his/her results may apply for scrutiny or can challenge the evaluation by paying the applicable fees.
- University has made this process online but a student has to apply within 15 days from the announcement of the result.
- In scrutiny the grand total of the students evaluated answer book is done again and noted down in case of any change.
- In challenge evaluation the answer booklet of the student is evaluated again and if the variation of marks is more than 15, the marks of the student will be updated.
- Challenge evaluation fee is reimbursed by the University to the students in case of improvement in marks in comparison to the first evaluation.
- Other type of grievances like data missing in the question papers, question asked from outside the syllabus are communicated to the controller of examination of the university by the concerned Center superintendent of the examination center through the web portal of the university /telephonically during the examination and the university resolves such issue during the examination only.
- Any unforeseen grievances of students related to examinations that are not clearly stated in the AKTU rules & regulations shall be resolved /addressed by the Controller of examination of the university from time-to-time.

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:

University publishes common Academic Calendar for all courses at the beginning of each session. In line with university academic calendar, college prepares its own academic calendar well in advance before the commencement of the semester and adheres to it in a time bound manner. All the academic activities are planned and executed as per the academic calendar plan. Internal assessment exams are conducted as per the schedule of academic calendar.

Academic Calendar is prepared by Dean Academics in consultation with the members of Academic Committee and same is then uploaded on college website and displayed on notice board. Academic activities are always given priority and all other activities are performed without disturbing the classes.

##### The institute refers the academic calendar to adhere the planned curriculum and other activities in following manner:-

1. The head of the department finalizes the course allocation for the faculty members based on their choice and area of interest or expertise.
2. Time-table in-charge of each department prepares the timetable as per university guidelines for credit hours for each subject prior to the commencement of the classes. Time-table is uploaded on the college ERP and displayed on the respective department notice boards.
3. Every faculty member prepares course file which includes teaching plan for each theory and laboratory courses before the start of the semester.
4. Attendance of the student is displayed on college ERP as well as on departmental notice board (fortnightly).
5. For the students having poor attendance i.e. less than 75%, letter to the respective parents are sent by post on monthly basis. Moreover, they are also informed telephonically.
6. The performance of the students is assessed on a continuous basis by conducting three sessional tests per semester where the average of best two is taken. First, second and third sessional test is conducted after completion of 1/3rd, 2/3rd and full syllabus respectively. These tests are conducted in evenly spaced intervals to avoid pressuring the students with too many examinations.
7. All question papers are set based on the OBE format. They are mapped with their respective course outcomes that are stated in the beginning of the course.
8. Course Coverage Report is reviewed by Dean Academics/Director in meeting of Academic Committee.
9. Student Feedback is taken once in each semester especially after First Sessional Test.
10. In addition to the tests, assignments, mini projects and quiz are also given and evaluated time to time.
11. The evaluated answer books are shown to the students and an opportunity is given to the students to discuss the discrepancies with the teacher. The teacher rectifies any error on the spot, if any.
12. Attendance and marks of sessional test are uploaded on college ERP for information to all

stakeholders.

13. Every department in the institute keeps an eye on the quality of the teaching learning by daily monitoring of teaching learning activities by the head of the department and respective class coordinator/class counsellors.
14. Meeting of Academic committee is held every month to review all academic activity.

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:

The institution strives to become the most preferred destination for holistic education to meet the Industry demands. The vision and mission of the institution emphasize the development of wholesome technocrats with discipline and integrity. Each department has its own vision and mission statements which are mapped to the vision of the institution. The vision and mission of the institution are given in the prospectus, information booklets issued, college website and displayed at the entrance of every department building.

Effectiveness of teaching-learning process can be measured through learning outcomes which in turn are measured through the achievement of Programme Outcomes (PO) and course outcomes (CO). Every department has well defined Programme Education Objectives (PEOs),

#### The details of Program Outcomes, Program Specific Outcomes and Course Outcomes for all the programs and the mechanism of communication are explained hereunder:

1. Program Outcomes (POs) as given by the NBA is displayed in the prominent places in all the departments and also on the website.
2. Program Specific Outcomes (PSOs) are written for each program after thorough discussions & deliberations with stakeholders. The PSOs are also displayed at the prominent places in all the respective departments & also on the website.
3. Course Outcomes (COs) are written for each course in every program after discussion amongst the course instructors & course coordinator. The COs are kept in the course file & uploaded on the respective department website. The COs form the basis for achieving the POs/PSOs and Mission and Vision of the Institute, hence a brief description on writing a CO is given below.
  1. Course instructor defines the course outcomes using Bloom's Taxonomy and discusses with the course coordinator.
  2. The Department Accreditation Committee reviews the Course Outcomes (COs). The COs are agreed upon by the faculty of the program and should drive towards the POs and PSOs.

3. Each Course Outcome is mapped to Program Outcomes in terms of relevance. Three levels of relevance based on degree of correlation are used. The levels of correlation are 1 for low, 2 for medium and 3 for high correlation.
4. The contribution of course to each PO is expressed in terms of average relevance of COs mapped to that particular PO. Similarly the value computed for all the courses including first year courses shall be entered for the corresponding PO and PSOs.

**Awareness about POs/PSOs & COs is made to students by faculty at the beginning of the semester besides displaying them in the respective departments, and on the college website.**

File Description	Document
COs for all courses (exemplars from Glossary)	<a href="#">View Document</a>
Any additional information	<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 program outcomes and Program Specific outcomes are assessed with the help of course outcomes of the relevant courses through direct attainment. Further the feedback from different stake holders are also taken to calculate the attainment of program outcome and program specific outcome. Following are the tools used in direct attainment process.

#### **Direct Assessment Tool**

- **Internal Assessment Test:** The Internal Assessment marks in a theory paper are based on three tests generally conducted at the end of 4, 8 and 12 weeks of each semester. It is a metric to continuously assess the attainment of course outcomes w.r.t course objectives. Average of the better marks obtained from any two tests shall be the Internal Assessment Marks for the relevant subject.
- **Lab Assignments:** Lab Assignment is one of the measuring criteria to mainly assess student's practical knowledge with their designing capabilities. In case of Practical, the marks are based on the laboratory records, quiz and attendance
- **Theory / Practical Semester Examination:** Semester examination (theory or practical) are the metric to assess whether all the course outcomes are attained or not. Semester Examination is more focused on attainment of course outcomes and uses a descriptive exam
- **Seminar:** The Internal Assessment marks in case of seminars in the final year are based on the evaluation at the end of 7th semester by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom is the seminar guide
- **Project:** The Internal Assessment marks in the case of projects in the final year are based on the evaluation at the end of 7th and 8th semester by a committee consisting of the Head of the



concerned Department and two senior faculty members of the Department, one of whom is the project guide.

- **Rubrics:** Rubrics are basically the performance evaluation parameters which are used to find the gaps in the teaching learning process. Institute follows the methodology of proper gap analysis and fulfilling the gap in time through teaching learning process and various co-curricular activities.

Based on the above mentioned tools attainment of course outcome is calculated first. After the calculation of the course outcome, attainment of the program outcome is calculated based on the mapping of course outcome with the program outcome.

### Indirect Assessment Tool

- **Alumni Survey:** Collect variety of information about program Satisfaction and Institute from the Alumni students
- **Exit Survey:** Collect variety of information about program Satisfaction and Institute from the final year students
- **Parent Survey:** Collect variety of information about program satisfaction and Institute from parents
- **Employer's Feedback:** Collect variety of information about the graduate's skills, capabilities and opportunities
- **Student Feedback:** Collect variety of information about teaching and learning process

Final attainment is calculated by taking the 80% weightage of the direct attainment method and 20% of the indirect attainment method

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

**Response:** 94.98

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

Response: 852

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

Response: 897

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

## **2.7 Student Satisfaction Survey**

### **2.7.1 Online student satisfaction survey regarding teaching learning process**

**Response: 3.41**

NAAC

## 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:** 78.03

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)

2017-18	2016-17	2015-16	2014-15	2013-14
10.82	0	34.65	8.21	24.35

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:** 2.7

3.1.2.1 Number of teachers recognised as research guides

Response: 6

File Description	Document
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:** 0.21

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

Response: 14

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

Response: 339	
File Description	Document
Supporting document from Funding Agency	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Funding agency website URL	<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:**

#### **Entrepreneurship Development Cell:**

This cell is a Business Incubator Center for various research proposals and innovative ideas supported by MSME, Govt. of India and is also a partner of NIESBUD, a Govt. of India sponsored organization promoting skill development course. At present 11 innovative projects worth approximately 60 lakhs have been funded by MSME.

Two Skill development programs have been organized in the area of refrigeration and air conditioning, and basic electrician training (three months course certified by NIESBUD), 30 unemployed youth were benefitted by this program.

Other initiatives of the cell are:-

1. NPTEL Awareness
2. Spoken Tutorial Program
3. Virtual Lab Program
4. MOU with Electronics and ICT Academy, IIT Roorkee
5. Workshop on Funding Opportunities for Startups funded by TEQIP III, AKTU Lucknow
6. STARTUP PARIKRMA 2018, 9TH EDITION

#### **Authorized Training partner for Pradhan Mantri Kaushal Vikas Yojana (PMKVY):**

PMKVY is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL). The program is first time introduced in Civil Department. 25 students were registered in this program out of which 23 attended the course and exam, 19 students successfully completed the course and got certified.

#### **MOUs & Centres of Excellence:**

MOUs are signed between the Institute/Programs and the related industries/research organizations for effective transfer of technical knowledge to the students and to relate the theoretical knowledge to relevant applications. At present Institute has signed MOUs with 11 industries including Infosys, Texas Instruments, Microsoft, Tech Aadityaa etc. Besides these MOUs, the institute has 4 center of excellences in collaboration with Texas Instruments, Tech Aadityaa, Electronics for You and E-Yantra Robotics Club for effective Industry academia partnership.

**Research Laboratory:**

To promote research culture and to conduct research in frontier areas of technology every program has a research lab which is used for development of innovative projects by the faculty members, UG & PG students.

**Distinguished lectures & Industry visits**

Institution has good network of industries that play an important role in the growth of the institution. Experts from the industry are invited regularly to deliver lecturers on various topics of relevance which not only enhances the knowledge of students but inspires them to have greater goals. Industry visits are regularly organised to understand the practical applications of theory. Institute arranges the industrial visit for the students and provides the transport facility for the visit.

**Professional Societies and clubs:** The College encourages and promotes setting up of various Societies like ACM, CSI, Genesis, Trinity, Gentrionix, Srijan, Mechanica, ISHRAE, Vidyut, E-SAC both at the college level & at the department level to achieve the specific objectives. These societies organize different co-curricular activities to promote innovation among the students. Institute has also established robotics club and hobby club where every student can implement his/her innovative idea.

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:** 88

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

2017-18	2016-17	2015-16	2014-15	2013-14
29	22	13	14	10

File Description	Document
Report of the event	<a href="#">View Document</a>
List of workshops/seminars during the last 5 years	<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:** Yes

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

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 2

3.3.3.2 Number of teachers recognized as guides during the last five years

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:** 0.47

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

2017-18	2016-17	2015-16	2014-15	2013-14
27	20	19	25	13

<b>File Description</b>	<b>Document</b>
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:** 1.31

**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**

2017-18	2016-17	2015-16	2014-15	2013-14
70	81	50	38	52

<b>File Description</b>	<b>Document</b>
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:**

**Institute is well aware of its social responsibility that's why it conducts a lot of extension activities. Some of the major contribution of the institute for the society are as follows:**

- 1. Rope of Hope:** This is a society formed by the students under the mentorship of the faculty

members in which they take care of the poor children of the neighboring society. As the institute is situated in the industrial area so in the surrounding there are a lot of children of laborer who are not able to get education. So the institute and the students have taken an initiative to literate such students by conducting the classes in the evening hours after the college timings. Nearly thirty students from the nearby area come regularly to attend such classes. Those students are also provided school bags and the uniform to join the school.

2. **Blood Donation & health checkup camp:** Institute is aware that the blood donation is one of the most significant contributions by the human being. Donation of blood can save a life of many individuals that's why institute organize blood donation camp every year. In blood donation camp the faculty & staff members and the students donate the blood. All the donors are facilitated with a Blood Donor card and institute awarded by the Memento. Besides this the institute regularly organizes the health checkup camp in collaboration with the renowned hospitals of the city for the neighboring society, students and staff time to time.
3. **Pradhan Mantri Kaushal Vikas Yojana (PMKVY):** institute is a center for Pradhan Mantri Kaushal Vikas Yojana (PMKVY) . The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood. This will be helpful in fulfilling the vision of our honourable prime minister "Skilling is building a better india.if we have to move india towards development then skill development should be our mission".Institute has contributed significantly in the PMKVY and provided training on the topics like solar system and Computer networking to the unskilled person of the nearby society.
4. **AICTE Village Development program:** Institute is a part of AICTE village development program. Under this program institute has adopted a village in the Ghaziabad district. Program Coordinator with students regularly visit to the village and help them to fulfill the basic necessities. They also explain the resident of that village about the different government schemes and policies for their betterment.
5. **Plantation:** Institute is very much inclined towards the green initiatives that why institute initiates a drive of plantation every year in monsoon.
6. **Sewage Methane Bio Gas Project:** Abhishek verma, student of IPEC, in guidance of faculty has developed a system using which the cooking gas can be generated from the sewage. The gas has been supplied to the nearby tea shop. This project was funded by MSME. It project was praised by the honorable prime minister of India in his speech on world environment day-2018.

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



2017-18	2016-17	2015-16	2014-15	2013-14
2	1	3	1	3

File Description	Document
Number of awards for extension activities in last 5 years	<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:** 39

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

2017-18	2016-17	2015-16	2014-15	2013-14
17	7	7	5	3

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>

### 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:** 29.87

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

2017-18	2016-17	2015-16	2014-15	2013-14
1598	1218	989	717	467

<b>File Description</b>	<b>Document</b>
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>

### 3.5 Collaboration

<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>				
<b>Response: 95</b>				
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				
2017-18	2016-17	2015-16	2014-15	2013-14
28	21	14	20	12
<b>File Description</b>	<b>Document</b>			
Number of Collaborative activities for research, faculty etc	<a href="#">View Document</a>			
Copies of collaboration	<a href="#">View Document</a>			
Any additional information	<a href="#">View Document</a>			

<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>				
<b>Response: 40</b>				
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)				
2017-18	2016-17	2015-16	2014-15	2013-14
20	9	4	4	3

<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>

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## 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:**

Each Institution offering Technical Programme shall submit an application to the Council (AICTE), every year for Extension of Approval of Course(s) offered by the Institution. The availability of adequate Infrastructural facilities as per the Norms of AICTE Approval Process Handbook 2018-19 is given in table:-

**Availability of Instructional Facility (in Sq.m.) UG/PG**

S.No.	Type	Area Required as per AICTE	Area Available in College	in No.
01	Class Room & Tutorial Room	3498	5204	79
02	Additional Workshop/Labs	400	849	4
03	Class Room (PG)	99	217	6
04	Laboratory - All	3486	5337	73
05	Workshop - Basic	200	404	1
06	Drawing Halls	132	299	2
07	Seminar Hall	396	802	6

**Availability of Administrative Area (in Sq.m.)**

S.No.	Type	Required as per AICTE	Available in College	in No.
01	Director Office	30	54	
02	Board Room	20	38	
03	Office all inclusive	150	363	
04	Department office/cabin for HOD	120	277	
05	Central Store	30	63	
06	Maintenance	10	100	
07	Security	10	10	
08	Housekeeping	10	16	
09	Pantry for staff/faculty	10	10	
10	Exam Control Office	30	70	
11	Training Placement office	30	95	

**Availability of Amenities Area (in Sq,m,)**

S.No.	Type	Required as per AICTE	Available in College	in No.
01	Boys Common Room	75	100	
02	Girls Common Room	75	137	
03	Cafeteria	150	500	
04	Stationery Store	10	25	
05	First Aid cum Sick Room	10	10	

**Availability of Computational Facilities**

S.No.	Type	Required as per AICTE	Available in C
01	Internet Bandwith	64 Mbps	155 Mbps
02	Printers	33	87
03	Legal Application S/W	20	30
04	Legal System S/W	3	11
05	PCs to Student ratio	657	817

#### Availability of Library Facility

S.No.	Type	Required as per AICTE	Available in C
01	Volumes	24500	117892
02	Titles	4400	10585
03	National Journal	51	115
04	Library Management Software	1	1
05	Reading Room Capacity	150	270
06	Multimedia PC	10	14

#### Availability of Instructional Area-Common Facilities (in Sq.m.)

S.No.	Type	Required as per AICTE	Available in C
01	Computer Center	300	310
02	Library and Reading Room	845	1033
03	Language Laboratory	66	67

#### Availability of Other Facilities

S.No.	Type	Available in C
01	All weather approach (motorized road)	Yes
02	Barrier Free Environment	Yes
03	Electric Supply	Yes
04	General Insurance	Yes
05	Institutional Website	Yes
06	Standalone Language Laboratory	Yes
07	Medical & counseling	Yes
08	Notice Board	Yes
09	Potable Water Supply	Yes
10	Safety Provisions	Yes
11	Sewage Disposal System	Yes
12	Telephone & FAX	Yes

#### Apart from above, we have

- Entrepreneurship Development Cell (EDC) to foster the growth of innovation and entrepreneurship amongst the faculty and students.
- 3 standby power generator of 320 KVA, 250 KVA, 125KVA and One Solar power plant of 100KVA to take care of the power shut-down.
- 2 state-of-art Auditorium for conducting Workshop/Seminar/Conference.
- Playground for Cricket, Volley Ball, Football, Basket Ball etc.
- 3 Boys and 3 Girls Hostel.
- Solar water Heating System, GYM, RO Plant, Fire Extinguisher etc.

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:

The institution has facilities to promote extracurricular activities like sports and cultural events, as mentioned below.

#### Sports and Games

The college campus has a sports arena in which there are three badminton courts and Table Tennis courts. Their area is 42x15.22 sq.m. & about 75 students play daily in morning and evening. Billiards hall of about an are of 7x6.05 sq.m. which is used as per the slots provided to the students. A small hall of about 6.09x4.62 sq.m. is meant for those students who want to play chess and carom. The place is sufficient for 3 carom boards and 4 tables for chess. Institute has a cemented basketball court of area 28x15 sq.m. It is utilized for practice sessions as well as team matches. Institute also has an open volleyball court having an area of 18x9 sq.m. which is utilized by the students & employees in both day and night time. Near about 10 to 15 students practice long and high jump daily .Besides this, Also there are few who come for short put practice.

Apart from above, the institute also has large playground which is used for various outdoor games like. Cricket & Football.

#### Gymnasium

The institute has a well organized gymnasium of 1065 sq.ft. and 485 sq.ft.for boys and girls respectively. There are various types of machines such as Leg Pull-Down, Leg Extension, Butterfly, Hack Squat, Cable-Cross Bar, Flat Bench, Incline Bench, Decline Bench, Biceps machine, double twister, weighted chin up, Free weights of about 600 kg and various types of rods. Machines available in girls Gym include Tread Mill, Cross Trainer, Spin bike, Double Twister etc.

#### Yoga Center

Institute has a Yoga Center for students and its Employees. Daily yoga exercise takes place under the guidance of instructor to sharpen the intellect &improve concentration . Every year June 21st, international yoga day is celebrated to create awareness.

#### Cultural Activities

The institute has ample and well maintained **auditoriums/open theatre and seminar halls** for organizing

various indoor and outdoor cultural activities on regular basis.

There is one **open theatre (Rangpeeth)** to organize various outdoor activities whereas there are 2 state-of-art auditoriums, one with a seating capacity of **410** and another with a capacity of **200**. Besides this, the institute has **6** Seminar halls which are also utilized for conducting various events.

The institute has an active **Student Activity Cell (E-SAC)** wherein the students are provided with a platform to participate in various Cultural, Arts & Literary activities at intra collegiate level. For regular meetings and practice, there is a well maintained dedicated room allocated for this purpose. Every year, Inderprastha Engineering college has a vibrant celebration of UDBHAV(The inter college tech& cultural fest). During the cultural festival, talents of the students are established through on-stage and off-stage events like Solo Dance, Group Dance, Solo Singing, Group Singing, Mime, Essay Writing, Rangoli etc. Renowned Celebrities honor the day by their performance on the last day of the fest which is known as celebrity night.

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:** 100

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

Response: 70

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:** 17.21

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

2017-18	2016-17	2015-16	2014-15	2013-14
239.33	437.34	285.34	284.45	259.21

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:

Inderprastha Engineering College (IPEC) Library is automated with ERP based IPECSOFT Software, Version 15.2.1, It is In-house developed Software working effectively since 2009. IPECSOFT, an integrated Library Automation Management Software materializes the need of Library and Library Users. The functions of IPECSOFT are grouped into Library Management Module and Web Module. These modules cover Acquisition, OPAC (Online Public Access Catalogue), Circulation, Membership, Library Statistics and System Administration. Web Module of IPECSOFT covers OPAC for all the Users, Daily, Weekly, Monthly Circulation Statistics, Summary and Usages of Books for Higher Authorities.

#### The Important features of different Modules of IPECSOFT Software are as below:

**1. Acquisition Control :** Book acquisition means the methods by which collection is build or added to the library stack. Acquisition Section is responsible for selection and purchase of Books. The library may select vendors, negotiate price, place an order, and select individual titles. There are generally five steps taken in order to acquire Books for a library collection.

- Request Processing
- Verification and Approval : Check the availability and Approval of Authorities.
- Ordering : Order Placed with Approved Vendors.
- Receiving Orders and Verify the Books from Purchase Order.
- Technical Work : Accessioning, Classification, Data Entry in IPECSOFT and Shelving.

**2. OPAC (Online Public Access Catalogue):** Users can search library Catalogue to locate book(s) available in library. In simple language, it is an electronic version of the card catalogue. OPAC is the gateway to library collection. Thus OPAC is a systematic record of the holdings of a collection. Its purpose is to enable a user of the collection to find out the physical location of the information in the collection. It is an access tool and resource guide to the collection of a library or libraries which provides bibliographic data in machine readable form, facilitates search interactively on computer terminal by a user.

The OPAC has simple and advanced search facility with the minimum information of the item by using



Author, Title, Subject, Keywords, Department, Class Number, Accession No., Publisher and Member ID. or combination of any of two or more information regarding the item. Major functions provided in the module are:

- Simple Search
- Advanced Search

**3. Circulation Management:** The circulation module makes it possible to define different and independent circulation policies for library, irrespective of the complexity of the circulation policies. This module takes care of all possible functions of circulation like Issue, Returns, Renewal and Reminders for Overdue of library Books according to Borrower's Limit for Books and Duration.

**4. Membership Management:** This module deals with membership management, maintenance and No Dues status of library Members. Database of Users (Students, Faculty Members and Staff) Maintained by registrar office and library share this data with permission to users.

**5. Library Reports and Statistics :** Generates Various Statistical Reports of available Resources, Users and uses of the material. based on Specific filters, According to the particular needs of the Library, export information from the reports to spreadsheets or text files to use them in other applications.

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:**

The college has fully automated Central Library and all the departments have its own departmental Libraries. The library has a good collection of books of 117892 volumes with 8299 titles on different disciplines with separate section, 144 National/International Journals/Magazines, 315 Bound Volumes, 337 E-Journals. College has the practice of collecting and maintaining rare books, special report and other Knowledge Resources to the benefit of the student and faculty members for their knowledge enhancement and their research activity. Overall Central Library has a collection of 130 Rare books and Knowledge Resources for Reference, Higher Studies, Career Development and research Purpose. Separate Reference Section supplies with the collection of books for GATE, GRE, TOFEL, IELTS and other Competitive exam. Apart from this, it provides other knowledge resources like E-Learning resources from NPTEL, NDL also.

List of such books is attached.

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

#### 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:** C. Any 2 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:** 82.26

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

2017-18	2016-17	2015-16	2014-15	2013-14
66.07	73.01	139.01	69.84	63.38

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>

<b>4.2.5 Availability of remote access to e-resources of the library</b>	
<b>Response:</b> No	
<b>4.2.6 Percentage per day usage of library by teachers and students</b>	
<b>Response:</b> 6.57	
4.2.6.1 Average number of teachers and students using library per day over last one year	
Response: 223	
File Description	Document
Any additional information	<a href="#">View Document</a>

### 4.3 IT Infrastructure

<p><b>4.3.1 Institution frequently updates its IT facilities including Wi-Fi</b></p> <p><b>Response:</b></p> <p>Institution has adequate and latest IT infrastructure including Rack Mounted Database server, Application server and File Server behind the Firewall with Gateway level Antivirus and user authentication. There are more than 1000 Desktop computers most of which are configured with i3 and i5 series CPU. Application level and User Access Control manage with Firewall. IDS and traffic monitoring on different ethernet port is executed by Firewall. Internet backbone is fiber optic with 155 Mbps &amp; 20 Mbps backup leased line. All the internal building are also having Fiber Optic Connectivity. Connectivity is extended in Labs and offices through CAT6 Cable and Gigabyte Switches. Controlled Wi-Fi access with user level and application level control is provided where Students, Faculty &amp; Staff members can access internet freely through their mobile phone, tablet or laptop. Moreover, Faculty &amp; Staff is also provided with individual system (Desktop) with internet facility.</p> <p><b>The plans for infrastructural development are given top priority as the College realizes the correlation between adequate infrastructure and effective teaching–learning. The strategies adopted for ensuring adequate infrastructure are as follows:</b></p> <ol style="list-style-type: none"> <li>1. At the beginning of the academic year, need/assessment for replacement /upgradation/addition of the existing infrastructure is carried out based on the suggestions from Governing Council, Heads of the Departments, System Administrator and Lab Technicians after reviewing course</li> </ol>
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requirements, computer–student ratio, budget constraints, working condition of the existing equipment and student’s grievances.

2. Optimal deployment of infrastructure is ensured through conducting workshops/awareness programs/training programs for faculty on the use of new technology.
3. Effective utilization of infrastructure is ensured through appointment of adequate and well qualified lab technicians/system administrator.
4. Renewal of AMC is done at the beginning of the academic year for the deployed Software applications, UPS and Generators.
5. The institute has always been reviewing the current needs and accordingly the internet bandwidth is upgraded from time to time.

**Year wise upgradation of IT infrastructure and Wi-Fi is given in the table below: -**

1. Institute has upgraded the 70 Mbps Leased line to 100 Mbps Leased Line Internet connectivity and then to 155 Mbps Leased Line over RF.
2. Internet connectivity is available in all the class rooms through high speed Jio WiFi network.
3. CCTV cameras have been installed in the campus for 24x7 surveillance.
4. A new state-of-art Auditorium equipped with latest technology is in use.
5. All the classroom and Seminar halls are equipped with LCD/OHP Projector.

	2014-15	2015-16	2016-17	2017-18
Desktop Computers	100	48	30	132
Laptop				
Printers		13	3	5
Scanner	1			2
Server				
Projectors	42	5	13	11
UPS	2			2
Software	15	11	13	11
Access Points (Switch)	14	5	22	17
CCTV/IP Cameras			37	42
Firewall		1		
Internet Bandwidth	30 Mbps	70 Mbps	70 Mbps	100 Mbps

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

**4.3.2 Student - Computer ratio**

**Response:** 3.88

File Description	Document
Any additional information	<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:** >=50 MBPS

File Description	Document
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:** 11.67

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)

2017-18	2016-17	2015-16	2014-15	2013-14
0.00	105.90	517.28	442.97	0.00

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:**

The comprehensive infrastructure of the College is constituted by elementary features like buildings, classrooms and playgrounds, and advanced attributes like ICT-enabled classrooms and laboratory facilities.

The Institute has Civil Engineer/Administration Department that oversees the maintenance of buildings, classrooms, library, sports complex and laboratories etc. The Civil Engineer/Administrative officer is headed by the Director who in turn monitors their work at the next level. They both are accountable to the Director and function as the coordinator for efficiently organizing the workforce, maintaining duty files containing details about their individual floor - wise responsibilities, timings, leave etc. They conduct periodic checks to ensure the efficiency / working condition of the infrastructure. They also look after the regular maintenance of civil works such as furniture repairs, masonry and plaster works, painting, carpentry, plumbing and house-keeping. The quality of drinking water is tested time-to-time. The fire extinguishers are refilled timely. Overhead water tanks are cleaned periodically.

Adequate House-Keeping staff is employed to meticulously maintain hygiene, cleanliness and infrastructure in the campus so as to provide a congenial learning environment. Classrooms, Faculty & Staff rooms, Seminar halls and Laboratories, etc are cleaned and maintained regularly by House-Keeping staff assigned for each floor. Wash rooms and rest rooms are well maintained. Dustbins are placed on every floor. The Green Cover of the campus is well maintained by a full time gardener.

Optimum working condition of all properties/equipment in the campus is ensured through annual maintenance contracts (AMC). The AMC purview includes maintenance of Generator, Air-Conditioners, CCTV cameras and Water Purifiers. Instruments, small equipment like balance, microscope, pH meter, dissolution apparatus, mixer, hot plate are repaired time-to-time and maintained periodically. Apart from contract workers, the college has trained in-house electricians and plumbers.

Lab assistants under the supervision of the System administrator maintain the efficiency of the computers and accessories. All computers and peripherals are checked by respective technical assistant for any problem. The software updates and ICT tool and internet related problems are resolved from the respective service providers. Proper inspection is done and verification of stock takes place at the end of every year. As per requirement of the maintenance of the IT equipments, the local hardware technician/service provider is called.

The institute has a library chairman. The chairman follows up with the librarian and regularly monitors the library to ensure and maintain all text books, reference books, articles, competitive examination books, magazines, journals, e-magazines, e-books and e-journals. The librarian regularly updates other resources such as NPTEL, SWAYAM, and NDL. The maintenance of the reading room and stock verification of library books is done regularly by library staff.

The institute has appointed a full time sports officer to look after all the sports activities. The institute has a large ground which has a separate court for Cricket, Kabbadi, Volley ball, basketball, and indoor sports arena having 3 badminton and Table Tennis courts. The institute also has a billiards hall and a separate hall to play carom and chess.

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

NAAC

## 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:** 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
00	00	00	00	00

#### File Description

#### Document

Upload self attested letter with the list of students sanctioned scholarships

[View Document](#)

Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

[View Document](#)

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

**Response:** 3.25

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

2017-18	2016-17	2015-16	2014-15	2013-14
102	106	106	110	116

#### File Description

#### Document

Any additional information

[View Document](#)

#### 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:** 56.04

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

2017-18	2016-17	2015-16	2014-15	2013-14
2830	1769	1871	1523	1310

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:** 56.69

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

2017-18	2016-17	2015-16	2014-15	2013-14
2628	1894	1911	1601	1390

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:** 63.62

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

2017-18	2016-17	2015-16	2014-15	2013-14
733	591	517	369	288

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:** 1.78

5.2.2.1 Number of outgoing students progressing to higher education

Response: 16

File Description	Document
Details of student progression to higher education	<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:** 80

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

2017-18	2016-17	2015-16	2014-15	2013-14
27	50	20	3	0

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

2017-18	2016-17	2015-16	2014-15	2013-14
27	50	20	3	0

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:** 129

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

2017-18	2016-17	2015-16	2014-15	2013-14
99	30	0	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	<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:**

Institute strongly believes in the philosophy of participative management. Students and faculty members are given representation in the committee where their representation is required. Students are empowered to play an active role as a coordinator of students associations, co-curricular and extracurricular activities. Each department has its own technical student council/forum viz. Gentronix(ECE Forum), Genesis(CSE Forum), Trinity(IT Forum), Srijan(CE Forum) and Mechanica(Mechanical Forum). These councils are responsible for conduction of various co-curricular and extracurricular activities throughout the year in their respective departments. These councils run under the leadership of the student incharge with a faculty as mentor. These forums organize various events on regular basis such as Invited talks from industry personnel, project exhibitions and competitions, Alumni talks, Hackathon etc.

There also exists a student council at institute level viz. E-SAC(Expressions - Student Activity Cell) wherein students of all streams play a pivotal role in managing activities related to literary (Medha), Cultural(Nivedha), Technical(Vividha) and Sports(Spardha). Every year, fresh student organizing teams are forwarded from each department. This student council further, under the mentorship of respective faculty conveners formulate an activity planner for the entire semester in accordance with the academic calendar of the institute.

Besides this, both boys and girls mess have a proper elected mess committee headed by students who administer and monitor the various activities related to their hostel mess. They are authorized to formulate the menu by taking the consensus of other hostel inmates.

The role of a student is very important in academics. In every class there is a provision of class representative who works as a bridge between the faculty members and the students. Class representative communicates the different issues faced by the students to the faculty members and head of department.

There is also provision of class committee meeting which includes five students from every class. This meeting takes place once in every month. This meeting is chaired by the head of respective department. Class coordinator is the member of the committee. This committee has the representation of students from all the segments of the students on the merit basis that means one student from top five, three students from average group and one from the weak student group. In class committee interaction, different issues related to academics and infrastructure are discussed. Various issues discussed are the feedback related to course content delivery, understandability, whether the doubts are properly addressed or not, etc. On this basis, the gaps are identified and rectified.

The institute has a Grievance Redressal Cell in which a few students are made a part of it wherein they are also equally given a right to put forth their opinion and suggestions.

Institute has a strong Alumni association and a student council plays an important role in organizing the alumni meet annually.

Following are the committees where students have been given representation:

- Class committee
- Cultural Activities Committee
- Literary Committee
- Technical Committee
- Mess Committee
- Discipline Committee
- Sports Committee
- Alumni Committee

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for 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:** 24.8

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

2017-18	2016-17	2015-16	2014-15	2013-14
37	29	29	14	15

File Description	Document
Report of the event	<a href="#">View Document</a>
Number of sports and cultural activities / competitions organised per year	<a href="#">View Document</a>
Any additional information	<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 involvement of alumni in supporting and providing contributions voluntarily to the institute is important for maintaining and expanding an institute's development. By establishing channels that facilitate closer ties between the alumni, students and institute, it provides crucial benefits in enriching the student's experience while being at the institute. Every alumni has experienced being a student to becoming a unique and different graduate, hence there is potential for all alumni to contribute to the institute in different ways and scale and they are doing their job very well for the institute.

**1.Role model and inspiration:** Alumni is an effective role model and are easily accepted by students. With the return of the alumni to support the institute, they bring with them credibility and justification as part of a successful institute, having breathed the same air and encountering similar challenges faced by the students. Experiences that are shared by the alumni with students whether in time management, development of self-discipline and character, or in career management can be more easily accepted as guidance and inspiration by students. Through this way, alumni assist in strengthening confidence, improve motivation and inculcate the right culture in line with what the institute intends to convey to its students time to time.

**2. Career mentor:** Competition in entering the work force is becoming more intensive as a result of a higher number of graduates compared with a limited number of job opportunities. Job availability is more critical in certain sectors. In the final year of their studies, students must identify seriously

their career prospects. This is the right time for alumni to support the students by mentoring them on their career opportunities in the industry and opening channels for the students for acceptance, either in undergoing practical learning or work experience in the institutions where the alumni reside in.

**3. Distinguished Lecture Series:** It is an academic activity that is created and organized by IPEC, Ghaziabad with the generous support and cooperation in the form of our alumni members & other well wishers. Under these lectures, the respective department organizes one or two lectures every year by inviting distinguished personnel in the concerned area.

**4. Student's activities & development:** Alumni Portal is used to support the Students placement activities, initiatives undertaken under the experienced alumni, creation of references towards institute.

**5. Community Outreach Activities:** While IPEC Ghaziabad focuses on excellence in knowledge and research, it is important for us to be aware of the needs of the community lying in the immediate vicinity and make a meaningful contribution towards them. In fact, a number of groups on campus. have been active in addressing some of their problems. Their activities have been supported in part by campus residents, alumni and the Institute. The contributions from the alumni are routed through the portal of the Institute, which is handled by the **Alma connect** .

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

File Description	Document
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:** 5

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

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	1	1	1

File Description	Document
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>
Report of the event	<a href="#">View Document</a>

NAAC



## 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:

The Vision & Mission of the institute are prepared taking into consideration the views of all the stakeholders namely management, faculty, students, parents, alumni, and industry persons. The Institute strongly believes in transparency, participative leadership and delegation of powers at various levels.

##### The vision of IPEC is as follows:

*"National leadership in Human Resource Development, Excellence in Education and impacting Society through Globally Competent Technologies".*

##### The Institute achieves its vision through the following mission statements:

- *Be the most preferred choice of Student, Faculty and Industry.*
- *Be a National Level Technical Institution fostering Teaching, Research, Extension Education, Innovation, Leadership and Entrepreneurship Spirit.*

The Governing Council of the institute is constituted as per the guidelines of AICTE. It consists of members from Management, Academic Institutions, Industry, Statutory bodies and representatives from faculty with Director as member secretary. All the academic & administrative issues like budget, recruitment, purchases, admissions, promotions, conferences, variation in intake etc., are discussed, approved and implemented by the governing council.

The council of HODs meets on fortnightly basis where all the academic issues are discussed, appropriate decisions are taken and communicated to the staff through circulars. In addition, members of management, Director, Dean academics and registrar conduct meeting on weekly basis to take stock of the progress and deliberate on challenges and also give proper direction to the institute in line with the Vision & Mission. Also, PAC meetings are held in every department once in a semester to discuss the progress made, set targets and plan of action taken by the PAC. The recruitment committee consisting of members of management, Two external expert, Director & concerned HOD recruits staff following standard procedure in a free and fair manner. Similarly, all the purchases are made by the purchase committee that has a faculty representation.

Apart from the council of HODs following important committees have been constituted for smooth, transparent and effective functioning of the institute like, Anti-ragging, Accreditation, IQAC, Research, Examination, Women Safety and Grievance Redressal Committee/ Internal Complaint Committee (ICC) & so on.

The institution adopts a mechanism of self-appraisal of teachers and comprehensive evaluation of teachers by Head of the department and the basis of students feedback. Student's feedback about the faculties is taken once a semester. All the faculties are briefed about the appraisal criteria & the corresponding

weightage at the beginning of the academic year. Through participative management , the faculties are involved in various decision making bodies of the institute.

In addition, class committee meeting are held once in a month in presence of HOD and respective class coordinator to brief the students on important decisions taken, listen to their suggestions and also to address the grievances, if any.

The students are taken into confidence before implementing any policy. Similarly, faculty interaction meetings are held once in a month to discuss academic issues, obtain feedback and to take everyone into confidence in all the important academic decisions. The institute follows very effective, transparent and participative governance for effective growth of Institute.

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

### 6.1.2 The institution practices decentralization and participative management

#### Response:

#### Decentrization in working

The institute functions with decentralized administration that has complete transparency in the decision making process. The Governing council has delegated powers to the Director to conduct the Academics, institutional development, curricular and extra-curricular activities. The Director in turn has delegated certain powers to the Dean academics, HODs and office staff. The council of Dean & HODs with director as its chairman meets every week to discuss academic & administrative issues and to take appropriate decisions from time to time. The Director, Dean & HODs are delegated adequate powers for smooth functioning of the Institute.

The council of HODs has constituted many committees to decentralize the activities and for smooth functioning of the Institute. Each committee consists of members from all departments who meet regularly to carry out the duties and functions of the committee effectively. The coordinator of the committee briefs the Director on important decisions taken and the progress of their implementation.

#### Participative management

The institute practices a participative management at all levels. Whenever the management takes important decisions, it ensures that such issues are discussed in the HOD Meeting & in the Governing council, then only they are implemented. Director always discusses all important issues in the council of HODs meeting for their suggestions and opinions. In the faculty meeting which takes place on regular interval all academic issues, innovations, requirements are discussed and opinions are sought. Issues concerning with students are discussed in the class committee meeting which takes place on monthly basis, their suggestions are taken and are taken into confidence before implementation. Suggestions from stakeholders

are considered, discussed and if found suitable, implemented following transparency and fairness.

All the academic & administrative issues like budget, recruitment, purchases, admissions, promotions, conferences, variation in intake etc., are discussed transparently considering the joint consensus of all the concerned and decisions are taken for implementation.

### Case study

Academic Committee is one of the case studies to illustrate the decentralization and participative management being practiced in the institute. The objective of the Academic Committee is to take stock of the present status and deliberate on strategies, requirements and decide on the road map to achieve the vision of the institute. The Academic Committee consists of Director, Dean, HODs, Registrar and Head-HR. In the Academic committee, all the members present their views freely on various issues concerning the institute. All important issues on all aspects of the Institute are discussed there and decisions are taken considering the interest of the institute into account. Important decisions taken by the academic committee are communicated to the management of the institute. The institute has made remarkable progress in the last ten years as most of the decisions that were taken in the academic committee have been implemented successfully after consulting faculty and students wherever required. Some of them are

1. NBA accreditation
2. NAAC accreditation
3. Establishment of centre of excellence
4. Upgradation of labs
5. Signing of MOU with different industry
6. Improvements in teaching-learning process as per the outcome based education Model.

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

## 6.2 Strategy Development and Deployment

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

#### Response:

The Institution has designed a perspective plan for the development. Some of the characteristics of the plan involve the following:

#### Teaching and Learning

- Creating a conducive learning environment.
- Improving the infrastructure to facilitate learning.
- Incorporating creative ideas in delivering the subject area. This helps in generating interest towards

the subject. By this approach, the student success rate increases.

- Disseminating best practices for Teaching and Learning to the faculties.

### **Research Development**

- Establishment of research amenities to encourage and cultivate the research culture among the learner community.
- Promotion of consultancy and research to the staff and students.
- Highlight the innovation and creativity in all aspects of activities of the Institution.
- To promote collaborative research

### **Industry Interaction**

- Focusing on multi-dimensional evaluation areas. This helps in moulding the students to meet employer's requirements.

### **Activity successfully implemented based on the strategic plan (NBA Accreditation)**

Institute always believes to provide quality education to its students and tries its level best to produce socially responsible and innovative engineering graduates for the nation. For an engineering institute it is important that its quality of education should be certified by any external agency due to following advantages:

- Institution builds up a Brand.
- Students and parents select the institutions and programs for admission on the basis of accreditation.
- Students get quality education and better employment opportunity.
- Employers in deciding about the institutions for recruitment of graduates.
- Institutions to avail the benefits from regulatory bodies and funding agencies institutions.
- Graduation from an accredited program is an Educational Passport for engineer's mobility across good number of advanced nations and emerging economies.
- Graduates may get leadership positions and challenging technology development opportunities.

Keeping in view the above mentioned advantages institute always tries to fulfill norms and standards for accreditation. The quality of education of our institute has been accredited two times earlier by the National board of accreditation. As per the strategic plan of the institute, the short term goal(2016-19) was to initiate accreditation(NBA/NAAC) processes for quality enhancement and get accredited by the NBA as well as NAAC. Accreditation as per current norms is based on the outcome based education, so the institute adopted OBE model of education and implemented it in the entire institute. Under OBE model of the education, the outcomes are measured at each and every step and the gaps are filled immediately.

As per the strategic plan, institute applied for NBA accreditation for three Programs as follows:

1. Computer Science & Engineering
2. Electronics & Communication Engineering
3. Mechanical Engineering.

NBA scheduled a visit of expert team to evaluate our institute on 06-08 October, 2017 Experts of the

accreditation team evaluated our three programs on the parameters defined by NBA and the three programs mentioned above got accreditation from the NBA for three years.

In the second phase, institute is planning to apply for NAAC accreditation for the institute and NBA accreditation for two more programs i.e. Information technology and Civil engineering for which institution has already submitted the SAR for evaluation.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for Additional Information	<a href="#">View Document</a>
Strategic Plan and deployment documents on the website	<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:

There are different bodies that give academic and administrative leadership to the institution. An optimum level of decentralization through the autonomous departmental system and participative decision making process are in practice. For proper implementation of the policies framed by the governing council and to fulfill the statutory requirements there are following major bodies/committees/cell in the institute

Committees	Role & Responsibilities
Governing Council (This is the supreme body of the institute)	<ol style="list-style-type: none"> <li>1. Framing/Approval of Rules and Regulations and Policies of the Institute</li> <li>2. Approval of Appointments</li> <li>3. Approval of allocations of budget</li> <li>4. Planning for continuous growth of the Institute</li> <li>5. Academic Review</li> </ol>
Academic Committee (This committee is constituted for the academic monitoring of the institute)	<ol style="list-style-type: none"> <li>1. Draw Academic Calendar</li> <li>2. Conduct of Sessional and AKTU Examinations</li> <li>3. Analysis of Examination results and draw strategy for better performance in future Examinations.</li> <li>4. Students Feedback and Analysis</li> <li>5. Analysis of Attainments of PEOs and POs of Academic Departments</li> <li>6. Organizing Conference, workshops,STC, FDP, Appraisals of Faculty &amp; Staff, etc.</li> </ol>
Training & Placement Cell (TPC)	<ol style="list-style-type: none"> <li>1. Assist in Training of students in various</li> </ol>

(This Cell is constituted to provide the support to the students regarding the placement)	Industries/Organizations in India and abroad. 2. Placement of students in various Industries and organizations. 3. Conduct programs for Personality Development, Improvement of Communication skills and Career Guidance
Alumni Affairs Committee (AAC) (This committee is constituted to deal with the matters related with the alumni)	1. To arrange Alumni Meet 2. To coordinate with Alumni. 3. Creation of social group for information to Alumni
Grievance Redressal Cell	1. Grievances received from students, faculty and staff are discussed in the cell. 2. Opportunity is provided to the aggrieved persons to explain their view point. 3. Redressal is provided in accordance with institute rules and proper counselling is done to fully satisfy aggrieved faculty/staff/students.
Anti-Ragging Committee	1. To ensure compliance with the provision of UGC regulation 2009 at the institute level. 2. To monitor and oversee the performance of anti ragging squad in prevention of ragging in the institution.

### **Service rules, procedures & Recruitment Policies:**

The institution strictly follows the service rules according to the AICTE and AKTU norms. The teaching and non-teaching faculty have the benefits of EPF/GIS/Gratuity and Casual/Earned/Medical/Maternity/Compensatory Leaves. Recruitment takes place according to the norms of the AICTE & University. The university/management selection committee comprising of Director, HOD and Subject experts decide the worthiness of the faculty member through his/her performance in the interview according to the parameters. The institute follows AICTE/AKTU norms for staff recruitment. The HoDs review requirements as per Teaching Load and submit the consolidated staff requirement to Director and conduct the recruitment as per the norms.

### **Promotional Policies:**

Promotion is the shift of an employee from one position to another with more responsible duties or requiring more skills. Promotions are based on performance, merit and qualifications required for the higher position. A pay rise is eminent in case of promotions but the Management reserves the right to do so.

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:** A. All 5 of the above

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
ERP Document	<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>

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

**Response:**

#### **Activity Successfully Implemented based on the Minutes of the Governing Council**

The institute functions with decentralized administration that has complete transparency in the decision making process. For the effective governance, the institute has a well defined organizational structure with duly defined role and responsibility. For effective monitoring and implementation of the policies, the Governing council and Academic committee have constituted many committees in the institution. Every committee has a convener and has its meeting scheduled on regular intervals. The minutes of the every meeting are properly documented and sent to all concerned person.

The vision of the institute is “**National leadership in Human Resource Development, Excellence in Education and impacting Society through Globally Competent Technologies**”. As per the vision of the institute, the institute wants to achieve the national leadership in placement. That is the reason why the governing council of the institute, which is the highest decision making body of the institute is always concerned about the placement as placement is the key component to attain the vision of the institute.

**As per the 15th meeting of the governing council held on 28 Jan 2016 (point No. 12)** the governing council reviewed the status of the placement of the institution. The Director of the institute briefed the governing council that total number of offers available to the students were 369 for the session 2014-15. This is 80% of the total of the students eligible as per the norms defined by different recruiting companies. Governing council instructed the Head Training and placement to focus more on increasing the placement. The Head Training and placement assured the governing council that the department will try its level best to increase the placement and they will try to achieve the target of 400 placement offers in the coming session.

The training and placement cell as per the instruction of governing council incorporated the following measures to increase the placement:

- **Soft Skill Development:** The placement cell constituted a committee at the level of every department in consultation with the concerned HOD for the effective implementation and monitoring of the personality development classes run by different expert agencies hired by the institution.
- **Student Committee for Placement:** The training and placement cell also constituted a student committee involving two students from each branch for effective communication with the students. This helped the cell to understand the need and problem faced by the students.
- **Meeting with the Placement Aspirant:** The placement cell had a open discussion with all the eligible students making them aware about the prerequisites and eligibility criterion of major companies.

By these measures, the training and placement cell was able to increase the placement of the institution and achieve the target of the 480 placement offers which is 90% of the total eligible students against the target of 400 placement offers given by the governing council. This is evident through **point number 5** of the minutes of the **16th governing council meeting held on 17th November 2016**.

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



## **Institutes provide the following welfare measures to their employees:-**

1. **Study Leave:** Study leave is sanctioned to Faculty members who want to pursue higher studies while being on roll of the institute.
2. **Psychological Counseling:** Institute is visited by Psychologist for the students and Faculty to get the help and facility of counseling in this regard.
3. **Sports Room & Facilities:** Sport facilities are provided by the Institute to encourage sports activities among the faculty members and staff.
4. **Employee Assistance Program such as FDP/STC/ Workshop:** Institutes provides assistance to Faculty for research and academic development related work by reimbursing their expenses on registration, TA/DA. In addition to this, Institute provides duty leave to attend such programm.
5. **Medical Facilities:** Medical facilities are provided in institute for Faculty/ Staff during their stay in the premises. A Medical practitioner is available during working hours in Administration department for medical treatment to employees. Specialist medical practitioner such as Gynecologist are also available intermittently. Homeopathy medicine is also being administered in addition to allopathic medicines. In addition College has tie up with Paras Hospital for immergency cases.
6. **Employees' Engagement Activities:** Employee engagement activities such as festival celebration, Picnic are being arranged by the Institute in order to provide coherent and conducive environment.
7. **Uniforms Facilities:** All class four personnel are provided one set of winter and summer uniforms once in a year.
8. **Yoga Classes:** Yoga classes are arranged for Faculty and staff in the Institute to prepare themselves for creative activities through spiritual & holistic development.
9. **Employee State Insurance Scheme:** Employees' State Insurance (ESI) is an integrated social security scheme, stated to provide social protection to employees in the institute and their dependents in contingencies such as sickness, maternity, or disablement or death due to employment injury or occupational diseases. This Scheme provides full facilities to insured persons and their dependents as well as cash benefits to compensate for the loss of wages or earning capacity in various situations.
10. **Employees' Provident Fund Scheme:** Employees' provident fund scheme is applicable to the institute employees under the employees' Provident Fund & Miscellaneous Provision act 1952 in order to assist the employee after retirement and have benefits to sustain their life in old age.
11. **Maternity Leave:** The employees can avail maternity benefit as per the rules of the institute.
12. **Accidental Insurance Scheme:** The accidental insurance cover is provided by the instituteto its employees for any expenses of untoward incidents during course of their employment.
13. **Internal Complaint Committee:** Internal complaint committee has been formed as per the Sexual Harassment Act to protect the employee from harassments of any kind. Guidelines are provided for proper action and also for protecting the aggrieved employee. Grievance Redressal Cell: Whether or not such conduct constitutes an offence under law or a breach of the service rules, an appropriate complaint mechanism is created in the institute for redressal of the complaint made by the employee.
14. **Fixed Holiday:** Employees are provided 1st and 3rd Saturday as fixed holidays apart from Gazetted and restricted holidays declared by government of Uttar Pradesh.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for 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:** 13.68

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

2017-18	2016-17	2015-16	2014-15	2013-14
21	18	19	40	49

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>
Any additional information	<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:** 13

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

2017-18	2016-17	2015-16	2014-15	2013-14
28	12	12	6	7

File Description	Document
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:** 53.38

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

2017-18	2016-17	2015-16	2014-15	2013-14
209	127	105	91	63

File Description	Document
Details of teachers attending professional development programs during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:**

Performance Appraisal system is one of the essential drive for providing quality education. The Institute strictly follows all the basic recruitment and promotional policies as stipulated by AICTE, AKTU as well as Government of Uttar Pradesh. A well-defined faculty and non-teaching staff appraisal system is adopted in the institute. The faculty appraisal contains the following salient features to capture all the aspects of academic performance.

1. End Semester results
2. Feedback from the students
3. Research publications by the faculty
4. Consultancy done by the faculty member
5. Book published by the faculty member
6. FDP/Workshop conducted or attended
7. Grant received from funding agencies
8. Conference, Seminar, workshop attended

## 9. Contribution at department & institute level

### 10.HODs/Director report covering

- Professionalism
- Attitude
- Attendance & punctuality
- Adaptability/Response to change
- Dependability
- Leadership
- Public relation & interpersonal skills
- Effective counseling of students
- Proposals sent for funding agencies
- Awards/Prizes won at state or national level

All the faculty members are briefed about the appraisal criteria & the corresponding weightage to create awareness and also to obtain feedback for improvement of the appraisal system in the beginning of the academic year itself. Faculty members are reminded & encouraged periodically by their respective HODs on appraisal criteria to ensure that faculty members put in maximum efforts to score maximum points in the appraisal. At the end of the academic year, faculty members carry out self appraisal & submit to the concerned HOD. HOD, in-turn, discusses with the concerned faculty member before sending the appraisal report to the Director. He discusses with HOD & recommends to the management for the sanction of annual increment if the report is Satisfactory. In case of extraordinary performance by any faculty member, extra increments are also given to them. In case the report is not satisfactory, concerned faculty member is not sanctioned as increment. Concerned faculty member is also informed about this. There are many cases where faculty member who joined as lecturer have been promoted to the post of professor. This shows the effectiveness of the faculty appraisal system of the institute.

The appraisal criteria for non-teaching staff is different from that of teaching. However, the procedure followed is similar to that of faculty. In case of nonteaching staff, appraisal is done by the reporting officer of the particular staff in discussion with the concerned staff. The staff appraisal system is comprehensive and ensures continued effective staff performance.

File Description	Document
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:

The institute has a mechanism for internal and external audit. We have our own internal audit mechanism where internal audit is an ongoing continuous process in addition to the external auditors to verify and certify the entire Income and Expenditure and the Capital Expenditure of the Institute each year. Qualified

Internal Auditors from external resources have been permanently appointed and a team of staff under them do a thorough check and verification of all vouchers of the transactions that are carried out in each financial year. Likewise, an external audit is also carried out in an elaborated way on a quarterly basis. The institutional accounts are audited regularly by both Internal and statutory audits. So far there have been no major findings / objections. Minor errors of omissions and commissions when pointed out by the audit team are immediately corrected / rectified and precautionary steps are taken to avoid recurrence of such errors in future. The institute regularly follows Internal & external financial audit system. The Institute has maintained the highest level of transparency in all financial transactions. It may be seen from the audited reports that all the financial transactions are carried out as per the standard norms. The audited reports are uploaded in the college website as per AICTE norms.

The financial audits are conducted on following dates for last five years:

Audit of the books of accounts of IPEC for AY 2013-14 was done on 22.09.2014

Audit of the books of accounts of IPEC for AY 2014-15 was done on 21.09.2015

Audit of the books of accounts of IPEC for AY 2015-16 was done on 26.09.2016

Audit of the books of accounts of IPEC for AY 2016-17 was done on 26.09.2017

Audit of the books of accounts of IPEC for AY 2017-18 was done on 24.09.2018

An extract of the audited report by the external agency is attached.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for 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:** 66.52

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

2017-18	2016-17	2015-16	2014-15	2013-14
4.07	2.43	23.37	5.63	31.02

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

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

#### Response:

#### Mobilisation:

IPEC is a self-financed institution, where the funds are generated through the fees paid by the students. Deficit is managed by taking advance from the parent trust/bank. Additional funding is obtained by faculty members from funding agencies like AICTE, DST, AKTU, MSME, PMKVY through Research proposals. These funds are utilized for the research and laboratory development.

#### Utilisation of Resources

The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure. The master key for taking the financial decision and related matters are Governing Council constantly monitor and encourage for the proper utilization of allocated funds as per need. The funds are allocated to each department during the preparation of yearly budget. This budget is generally for the requirement or up-gradations. In case of any need where the financial support is required, proper demand in writing is made from the concerned Department. For e.g. in case of any requirement, the details of the requirement of the equipment's, maintenance infrastructures etc are prepared and proper procedure for purchase is adopted. A statement of accounts containing details of income and expenditure, including budgetary is placed in front of the Governing Council.

Institutional budget is prepared by Director every year taking into consideration of recurring and non-recurring expenditures.

Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this, all coordinators of different cells are instructed to submit their budget to Director. All the major financial decisions are taken by the Governing Council of the institute. All the major financial transactions are analyzed and verified by the governing council under different heads like:

#### Infrastructure Built-Up

#### Library

#### Laboratory Equipment

#### Laboratory Consumables

#### Teaching and Non-Teaching Staff Salary

**Maintenance and Spares****Research & Development****Training and Travel****Miscellaneous Exp.****Others**

The details of budget and actual expenses are shown in the table below for the last three financial years. From the below table it is evident that the institute has utilized about 95 percent of the total allocated budget.

Years	CFY		CFYm1		CFYm2		CFY
	2018-2019 till 30/09/18		2017-2018		2016-2017		
Items	Budgeted	Actual Expenses	Budgeted	Actual Expenses	Budgeted	Actual Expenses	Bud
Infrastructure Built-Up	30000000	22881585	25500000	23933122	47600000	42111930	322
Library	6000000	1789459	7600000	6607363	12100000	7300717	152
Laboratory equipment	15000000	6288386	16000000	13124749	9600000	10084233	350
Laboratory consumables	10000000	3667558	14000000	12491028	13000000	11190647	132
Teaching and non-teaching staff salary	195000000	82040194	198500000	193120348	184000000	180718748	168
Maintenance and spares	50000000	23435082	56000000	50524232	59300000	55157518	613
R&D	700000	160513	600000	467403	600000	205976	110
Training and Travel	2000000	946140	2200000	1690396	10700000	4455931	387
Miscellaneous Exp.	300000	37112	300000	113780	200000	74580	200
Others, specify	60000000	29147353	60260000	58795581	90560000	53342552	802
<b>Total</b>	<b>359000000</b>	<b>170393382</b>	<b>380960000</b>	<b>360868002</b>	<b>427660000</b>	<b>364642832</b>	<b>379</b>

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

The institution has formed an Internal Quality Assurance Cell (IQAC) in July, 2017 earlier, academic committee was taking care of all the role and responsibilities of the IQAC. The cell is coordinated by a team of faculty representatives from all the departments. The formation was institutionalized through formal office order of the institute. The Institute's existing policies on academic and administrative systems in respect of process of teaching-learning and evaluation system, level of satisfaction for academic performances, faculty recruitment and training / qualification enhancement, are of high standard.

Two practices institutionalized as a result of IQAC initiatives are:

#### Weekly Test System:

The institute believes in the process of continuous evaluation of the students. In the earlier system the institute was conducting two sessional exam and one pre university test for every subject. It was felt that the student were not getting sufficient time to prepare for the sessional exam as the sessional exams were conducted for all subjects in a duration of three days and there was less time to fill the gap found in the evaluation of the students because first sessional exam is generally scheduled after one and half month since the inception of the session. So IQAC decided to introduce weekly class test system for first year students. Under this system on every Monday morning there will be a class test of two subjects in the first half . The major benefit of the weekly test is that the subject teacher is able to identify the gap and fill those gaps after a very short duration of time as the weekly test starts just after fifteen days since the inception of session.

The impact of the induction of the weekly test was measured on the basis of result of the first year. The clear pass % result of the first year before the induction of the weekly test was 63.2(92% promoted to next year) whereas after the induction of weekly test the result of first year increased to 69.32(98% promoted to next year) and the institute was ranked 8th on the merit list declair by Dr APJ Abdul Kalam Trechnical University, Lucknow based on result of the affiliating University among the 600 affiliated colleges.

#### Online Certification by the Faculty Members & Students:

Institute strongly believes that a teacher who is not technically strong and aware with recent technological development cannot produce good engineers for the society. Online resources are the most useful resources to enhance the knowledge level of any faculty member. For this purpose, the IQAC decided to motivate the faculty to join the NPTEL courses themselves and to mentor the students. In 2016-17, total number of certifications were 84 which increased to 243 in 2017-18. In 2017-18 three faculty members were in 1%



toppers of the course whereas three faculty members were in 5% toppers of the course. The comparison between these two academic sessions reflects how effectively the policy of online certification has been implemented by the IQAC.

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

IQAC takes continuous review of teaching learning process in the Institute. It mainly comprises of Director, Dean Academics and Heads of the department. The two policies which are implemented as per the review of IQAC are:

- 1.Redefining of Course Outcomes:** Institute has completely implemented Outcome Based Education (OBE) in its teaching methodology. Outcomes are evaluated at each and every step and the corrective actions are taken to fill these gaps. After the recent remarks received from NBA accreditation committee IQAC felt that there are certain gaps in the definition of the course outcome so it needs to be redefined as per the Bloom's taxonomy. For this purpose, the institute arranged some expert lecture on Bloom's taxonomy by the faculty members who have undergone the Bloom's Taxonomy thoroughly. Based on the training provided to the faculty members all the course coordinators in consultation with the concerned faculty redefined the course outcomes of all the subjects for the curriculum for all the programs. These course outcomes have been uploaded on the website of the institute for decimation. Sample course outcomes have been given below.

C215.1	Understand the internal structure of semiconductor material and the flow of current in junction under different bias condition.
C215.2	Explain the working of different Opto electronic devices.
C215.3	Analyze transistor and Mosfet amplifier at low and high frequency
C215.4	Evaluate the performance of different feedback topologies.
C215.5	Design the different type of LC and RC oscillator

### 2.Continuous Evaluation of the Final Year Project Work:

Institute strongly believes that final year project work plays a major role in the learning of the students. It is also very useful for the attainment of program outcomes like Project management and finance, team work, leadership and presentation skill of the student. Due to this, IQAC suggested to all departments to implement the continuous monitoring system of the final year project work.

Following are the steps taken for continuous monitoring of the final year project work:

1. Each faculty member would provide two topics to the students based on their area of specialization.
2. Student form their group containing 2-4 students and finalize the mentor for their group based on their interest.
3. In first phase of monitoring after one week, the student will present their idea of project with brief synopsis of the project.
4. In second phase of monitoring, the work done by the students will be evaluated by a group of faculty members including the project incharge and the mentor of the group with 2-3 senior faculty members of the department.
5. In third and final phase of the monitoring, the student will display and defend their working project in front of panel of experts and submit the project report.
6. Beyond this monitoring, the mentor will continuously monitor the project group under his/her guidance. Mentor assesment is given due weightage in formulating final marks.
7. Evaluation parameters for the evaluation of the project are annexed.

<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:** 0.8

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	0	0	0

<b>File Description</b>	<b>Document</b>
Number of quality initiatives by IQAC per year for promoting quality culture	<a href="#">View Document</a>
Any additional information	<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:** B. Any 3 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>
Annual reports of 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 Institute has grown in all aspects in the last five years. Major incremental growth is described below:

**1. Accreditation from NBA:** The institute has got 3 of its programs accredited by NBA in 2017 and this speaks volumes about the best practices and their successful implementation.

	2013-14	2014-15	2015-16	2016-17	2017-18
No. NBA Accredited Programs	3	3	0	0	3

**2. Ph.D. Faculty :** Five years ago, the Institute had 30 Ph.Ds faculties, this has steadily increased every year to 61 in 2017-18. Also, all the faculty members are with a minimum qualification of Master Degree.

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of Ph.D. faculties	30	35	39	49	61

**3. Placement of the students:** A dedicated training & placement department has seen tremendous growth with respect to the number of effective training programs conducted and corresponding placements in leading companies. Number of Students Placed in leading companies during last five years are given as under:-

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of Students Placed	288	369	517	591	733

**4. Professional Development Training Program organized by the Institution for Teaching Staff**  
 : Professional Development Training Program are organized at an increased frequency. Details are given as under:-

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of FDP/Conference Organized	7	6	12	12	28

**5. MOUs:** More MoUs with reputed Industries and organisations are signed to bridge the gap between Industry and Academic. Number of MOUs during last five years is given as under:-

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of MOUs	7	8	10	13	19

**6. Infrastructure:** Five years ago, the Institute did not have CCTV Cameras and Provision for Lift for Divyangjan. Today, there are 84 CCTV cameras in the campus for 24x7 surveillance and 3 Lifts are purchased worth Rs. 25 Lakhs to facilitate the differently abled students.

## 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:** 3

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

2017-18	2016-17	2015-16	2014-15	2013-14
3	0	0	0	0

File Description	Document
Report of the event	<a href="#">View Document</a>
List of gender equity promotion programs organized by the institution	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 7.1.2

##### 1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

**Response:**

**Institution shows gender sensitivity in providing facilities such as:**

1. **Safety and Security:** Inderprastha Engineering college, Ghaziabad formally known as IPEC, a prestigious and enknowned educational institution, keeps safety and security in view. We have taken many steps for ensuring safety such as having a separate lady guard provided at various locations like Girls Hostel, who is exclusively taking care of their security related concerns. She plays an important role for not allowing any unauthorized person inside the premises. Also, we have employed 2 female hostel wardens who are available 24\*7 for any assistance. For Girls Hostel, College has provided female housekeeping staff for each building and they remain inside throughout the day for cleaning and to make sure that the entire hostel must be in fully hygienic condition. Moreover IPEC is concerned about gender sanitization as well. For this, we have provided sanitary napkin vending machine at Girls hostel. This is maintained and checked under the female warden available in the hostel on routine basis. Entire college premises are covered with

CCTV cameras, just to keep an eye on all activities happening inside the campus and for close monitoring and action. Administration department has maintained a good liaison with the local police authority for any kind of help required in such cases. College has appointed especially female faculty member as a chief warden for the girl's hostel and she closely examines routine report from the ladies warden appointed there. Also for our college central library, we have another lady security guard who takes care of female student's frisking, depositing their bags, and making their entry into record register. We have separate committee to look after any issues e.g. Internal Complaint Committee, Internal Grievance redressal committee having more than 50% of female staff members. If they come across with any such issue, then incidents are addressed on immediate basis. Statutory committees like Anti-ragging committee, College Internal Complaint Committee and Anti sexual harassment committee are constituted as per the university guidelines and are functioning effectively. Adequate security forces are maintained round the clock in the campus and also in the hostel premises. The security forces go round the campus at regular intervals of time. Students shall always wear ID cards for easy identification by the security forces.

2. **Counseling:** IPEC has appointed one female psychologist Dr. Vidhi Gupta (counselor), to whom the students can come and share personal problems whether it is physical/mental etc. College has provided such an open friendly environment where any one can come and meet Director, Registrar or their respective HODs for any grievances.
3. **Common Room:** Common rooms are available for the female hostler candidates in each girl's hostel, where students usually spend their time peacefully. They can play/gather/watch TV or can have discussion, as per their convenience, also there is a gym available to keep them refreshed, healthy and fit for the entire day.

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

<p><b>7.1.3 Alternate Energy initiatives such as:</b></p> <p><b>1. Percentage of annual power requirement of the Institution met by the renewable energy sources</b></p> <p><b>Response:</b> 4.48</p>
<p>7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)</p> <p>Response: 8037.14</p>
<p>7.1.3.2 Total annual power requirement (in KWH)</p> <p>Response: 179278.68</p>

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

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

**Response:** 100

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

Response: 136

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 136

File Description	Document
Details of lighting power requirements met through LED bulbs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 7.1.5 Waste Management steps including:

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

**Response:**

##### **Solid Waste Management:**

Inderprastha Engineering college, keeps a close watch on all maintenance activities taking place inside the campus, through its Admin team whose responsibility is not to let any kind of waste dumped inside the premises, and to tie-up with various vendors who are called on regular basis to sell/auction the scrap & all waste from the labs, store, civil and few other departments. Scrap vendor comes with his vehicle and collects all stuff after negotiating the price. All old books, news papers, and other study material available in the stock, are given to the specific vendor for the recycling of paper waste. Entire Garbage is swept to the Main dustbin provided outside the college campus by the Nagar Nigam, and from there they collect the same and dump it away from the city.

##### **Liquid waste Management:**

Institute has taken sewage/drainage connection from the Nagar Nigam through which it disposes off all liquid waste inside the campus through drain and later this goes to the Local STP situated at Inderapuram Ghaziabad for the further recycling. This non drinkable water commonly used for watering the plants and cleaning purpose.

**E-Waste Management:**

E-Waste is also managed by our existing vendors. Any kind of such E-waste in the form of non-working condition such as desktops, monitors, and other equipments etc are given as a scrap and later after due evaluation either they go to the second hand market in case they are repairable, or else are simply disposed off.

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

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

**Response:**

**Rain Water Harvesting:**

Institute has rain water harvesting facility. All the rain water is captured from the catchment area which is the roof of the institute building. Conduits are the pipelines that carry rainwater from the rooftop to the harvesting system. (Poured in the bore well).

Mains water is a precious resource due to increases in demand from our ever growing population. Changes in rainfall patterns in the country have seen both drought conditions and flooding. Rainwater harvesting can provide increase in the ground water level for future water needs.

IPEC has established five Rain water harvesting tanks inside the premises at various locations which are connected with roof drain pipe. During the rainy season, the water gets collected in these tanks and later it goes to the ground water to maintain the water level in the surroundings areas. Maintenance (Civil) department keeps a close watch on the cleaning and other fitting or repair related things of these tanks.

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

Efforts towards green practices on the campus:-

**a) Bicycles:** The employees and students residing nearby are encouraged to come by bicycles. Thus we prevent the emission of carbon dioxide in the campus.

**b) Public Transport:** The institution is located just less than 0.5 km from the highway and 1 KM from the metro station. So we encourage our faculty members and students to use the public transport for safety, security and fuel conservation.

**c) Pedestrian Friendly Roads:** The campus has wide, well maintained black top roads, covering every block and corner of the institute. It has foot paths also.

**d) Plastic free Campus:** Use of plastic bags and cups are discouraged in the campus. Even in the canteen and Mess, usage of steel plates/paper plates and paper cups are mandatory.

**e) Paperless Office:** The Management has taken keen interest to make the office paperless. For that purpose, the institute has developed its own ERP system. This ERP system covers all the departments/sections of the institute. All the official information is communicated to the faculty as well as student through the ERP system only. The complete campus is Wi Fi enabled, making it much easier for paper less activities.

**f) Green Landscaping with Trees and Plants:** The institute has taken several measures for planting of trees to make a Green Campus. 50% of total area is covered with trees and lawns. A number of trees exist at different places in the institute. Tree plantation in the campus is a regular activity.

File Description	Document
Any additional information	<a href="#">View Document</a>
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:** 1.22

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)

2017-18	2016-17	2015-16	2014-15	2013-14
11.26	24.77	26.35	24.74	19.55

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	<a href="#">View Document</a>
Any additional information	<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>
link to photos and videos of facilities for Divyangjan	<a href="#">View Document</a>

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

**Response: 22**

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

2017-18	2016-17	2015-16	2014-15	2013-14
8	5	4	3	2

<b>File Description</b>	<b>Document</b>
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: 8**

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

2017-18	2016-17	2015-16	2014-15	2013-14
4	2	1	0	1

<b>File Description</b>	<b>Document</b>
Report of the event	<a href="#">View Document</a>
Any additional information	<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: No**

File Description	Document
Any additional information	<a href="#">View Document</a>
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:** No

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

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

**Response:** 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>

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

**Response:** Yes

File Description	Document
Any additional information	<a href="#">View Document</a>
Provide URL of supporting documents to prove institution functions as per professional code	<a href="#">View Document</a>

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

**Response:** 24

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

2017-18	2016-17	2015-16	2014-15	2013-14
11	4	4	3	2

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>

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

**Response:**

**Institution organizes national festivals and birth / death anniversaries of the great Indian personalities:-**

**2017-18**

- August 21, 2017 an interactive session was organized on the occasion of 75 years of Quit India Movement and 70 years of Independence by literary cell, E-SAC (Expressions- Student Activity Cell) under the mentorship of Dr Upasana Mishra.
- August 15, 2017 was celebrated as Independence Day to commemorate country's independence.
- New India Pledge-Celebration of 70 years of Independence and 75 years of Quit India Movement was ceremonized on 09/08/17.

## 2016-17

- 26th Jan 2017 was celebrated with a great zeal as the *day* when the Indian *republic* and its constitution came into force.
- A pledge was taken to revive the feel of patriotism and responsibility towards motherland on 26th Nov 2016 celebrated as constitution day under the mentorship of Dr Upasana Mishra.
- Through A documentary-‘India infracts with Dr. A P J Abdul Kalam’, former President of India and "Missile Man of India” and tree plantations a tribute was given on Dr APJ Kalam’s Birthday on 15th Oct 2016, recognizing his vision for developing india. Convener of the event was Dr Upasana Mishra.
- Celebration of Sir M Visveshvaraya's birthday 15 Sept as Engineers Day, through conducting and rewarding interdepartmental Project Exhibition, was facilitated by Dr Rambir Singh.
- Teachers Day, 5th Sept 2016 was celebrated by students with dignity and honor.
- Ms Meenakshi Sharma planned 15th Aug 2016, the Independence Day celebration to evoke the feeling of patriotism in the heart of faculty, students and every individual of IPEC.

## 2015-16

- *Honoring* the date on which the Constitution of India came into effect 26th Jan 2016 was celebrated as republic day under the guidance of Ms Meenakshi Sharma.
- Swami Vivekanand’s Birthday was celebrated on 12th Jan 2016 as happy national youth day with talks and sharings on his contributions under the guidance of Prof Shephali Tyagi & Prof Jyoti Sinha.
- To extend our feel of gratitude towards our constitution makers, 26 Nov 2015 was observed as constitution day under the supervision of Dr Upasana Mishra.
- Birthday of great scientist and former president was celebrated on 15th Oct 2015 with a great zeal after University has been renamed as AKTU, under the initiative of Prof D Ganguly.
- To celebrate Sir M Visveshvaraya's birthday as Engineers Day, an interdepartmental quiz competition was organized and prizes were distributed to winners under the supervision of Dr Pooja Tripathi and Dr Rambir Singh on 15th Sept 2015.

## 2014-15

- Celebrating the *day* when the Indian *republic* and its constitution came into force, 26th Jan 2015 was celebrated with a great zeal.
- Prof D Ganguly facilitated celebration of Sir M Vishvesvaraya's birthday as Engineers Day ie 15th Sept, 2014 through conducting and rewarding discussions and quizzes etc.
- Teachers Day 5th Sept 2014 was celebrated as Great leader and philosopher Dr. Radhakrishnan’s birthday and a day to express reverence towards teachers.
- Independence Day was celebrated on 15th August, 2014 as a national festival in IPEC commemorating the nation's independence from the British Empire.

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:**

#### **Transparency in academic and administrative functions:**

The functions of the institution and its academic as well as administrative units are governed by the principles of participation and transparency. Formulation of development objectives, directives and guidelines with specific plans for implementation by aligning the academic and administrative aspects improves the overall quality of the institutional provisions. Effective leadership by setting values and participative decision making process is key not only to achieve the vision, mission and goals of the institution but also in building the organizational culture. The formal and informal arrangements in the institution to co-ordinate the academic and administrative planning and implementation reflects the institution's efforts in achieving its vision.

Through internal Academic & Administrative Audit (AAA) the transparency is maintained. This audit is done by external auditor of ISO. Before the external audit of ISO, internal audit is conducted by the internal auditors for all the academic and administrative departments. All the stake holders are involved in A & A Audit. The information regarding the institute is freely made available to the public through the institute website viz.: [www.ipeec.org.in](http://www.ipeec.org.in). The Institute always takes care of its students since their enrollment till their overall development. Recruitment of faculty & all necessary procedures are practiced as per the guidelines given by AICTE & University. All circulars regarding students, teaching staff & non teaching staff are circulated through online portal. Governing council is the highest decision making authority. Which consists of members from the management, teaching staff, members from society and members from the different regulatory body. Planning & execution of different auxiliary functions are discussed & decided in this committee which are communicated to all stake holders.

#### **Transparency in financial functions:**

The institution has developed strategies for mobilizing resources and ensures transparency in financial management of the institution. Budgeting and optimum utilization of finance as well as mobilization of resources are the key issues handled by the IPEC Management. There are established procedures and processes for planning and allocation of financial resources which leads to effective & efficient use of financial resources. The Budget Process which is an inclusive and collaborative process is as follows:

Departmental Budget Templates are circulated to collect the Budget Requirements for the forthcoming year. The respective HODs of the departments then submit the requirements in the Standardized format which are consolidated. The various heads of the budget include the department capital requirements, staff cost based on the manpower plan, student & faculty related expenses, event expenses, research & development, administrative expenses including lab consumables, repairs & maintenance & other infrastructure related expenses, etc. Considering the financial matters, institute appoints internal & external auditors every year. This decision is always taken unanimously in the general body meeting (Governing Council meeting) of Governing Council. Audited statements regarding financial activities is available on institution website i.e. <http://www.ipeec.org.in/about/audit/>. Feedback from the stakeholders on a regular basis and acting on the same is an effective mechanism to ensure transparency and effective management.

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

## 7.2 Best Practices

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

#### Response:

### Description of two institutional best practices

#### Best Practice No: 1

#### Title of the Practice: Weekly Test System

This practice was primarily implemented to timely fill the gap in the evaluation analysis.

#### Objective of the practice:

1. The prime objective of the weekly test series was to enhance the student performance by timely recognizing the weak areas and fill the gap.
2. To identify the subjects well in advance in which the student would not be able to perform upto the mark.
3. To work on the weak areas wherein a student is likely to perform below expectation. This is supplemented with the help of extra classes , remedial sessions, tutorials, etc.

#### Practice

As the institute firmly believes in the process of continuous evaluation of the students, it was observed that the conventional system could be modified to improve the result. In that system, there prevailed two sessional examinations followed by a pre-university test for each subject. Moreover, the first sessional examination is generally scheduled after one and a half month after the commencement of the classes. So, we maynot be able to identify the weak students early and consequently would encounter delay to work upon them.

Hence the IQAC decided to introduce weekly class test system for first year students. Under this system, a cyclic test planned for each subject was incorporated in the academic calendar since inception of each semester and displayed on college portal for all. On every Monday, the first four lecturers are dedicated to two class tests whereas in the second half, students would attend the scheduled regular classes.

The major benefit of weekly test is that the subject teacher is able to identify the gaps and fill those gaps in time. Course Coverage content is also less and the student is able to focus more.

#### Evidence of success

Performance improvement in end semester examination: It was found that due to this practice there was a



great impact on the student regularity, their attention towards lecture delivery and overall performance. The impact of this practice was measured on the basis of end semester result. It was observed that the result of first year prior to this practice was 63.2(92% promoted to next year) and after the introduction of weekly test practice, the result escalated to 69.32(98% promoted to next year) and the institute was ranked in top 8 colleges at university level among all affiliated colleges.

### **Problems encountered and resources required**

Whenever a new practice is introduced, new challenges are bound to be encountered. Likewise, when this practice of weekly test was introduced, students showed a lot of reluctance as they found it hectic to follow a weekly test planner. Since their senior students were following the sessional plan in which each sessional is planned in a duration not less than a month, they comparatively felt the weekly test series to be hectic for them. But gradually they realized that this practice has somehow improved their overall performance in one or the other way. Resources required for these weekly tests is mainly the invigilating and evaluating faculties. Their workload also increased to some extent. Further the requirement of answer sheets and stationary also increased accordingly.

### **Best Practice No: 2**

**1. Title of the practice:** Employability skill development Program

**2. Objectives of the practice:**

- The graduates are inculcated with professional and ethical attitude, effective communication proficiency, teamwork skill and multidisciplinary talents.
- The graduates are equipped with strong knowledge and soft skills that allow them to contribute to the needs of industry, consultancy, government and academics.

**3. The Context:** Today's job market is not only looking for technical knowledge but also interpersonal and relationship building skills that help people to communicate and collaborate effectively.

**4. The practice:**

Employability skill development Program is run by the training & Placement cell of the institute. Training & Placement (T&P) Cell provides excellent career guidance and placement opportunity to students. The mission of the T&P Cell is to help students clarify their educational & career goals, acquire employment-seeking skills and ultimately attain desired employment. Institute has a dedicated team of professionals who works in coordination with HODs /faculty members to integrate academic curriculum with Project Work, Summer Training, industrial visits and Internship Programs. The Cell comprises of young, vibrant and enthusiastic team of professionals with management degree and industry experience. This program runs in three steps:-

1. **Assessment:** Association with expert assessment agencies to identify improvement areas of the students and impart training accordingly.
2. **Training:** Arrange training for the students for their overall development and improving the chances of their selection during the campus recruitment drives. Student specific training is as

follows:

- Soft skill training to the First year and Second year students.
- Campus Recruitment Training (Aptitude, Quant, logic, verbal and Reasoning) to Pre Final and Final Year students.

### 3. Industry Academia Interface:

- Ensure regular and close interaction between Industry Personnel and Students
- Lectures / workshops by Subject Matter Experts (SMEs) and Corporate Leaders
- Visits to prominent Industries.

Industry academia collaboration for training and helping the students to develop and clarify their academic and career interests on different emerging technologies are as follows:

- Infosys- Campus Connect Program
- Sopra Steria Academic alliance
- Dell- EMC Academic alliance
- Microsoft IT Academy program
- E – Yantra
- MOU with MRDC
- MOU with NISWA
- Center of Excellence by EdGate Technologies for setting of Texas Instruments Innovation Lab.
- Center of Excellence on VLSI and Embedded Systems by Tech Adityaa.
- MOU with EFY for setting of EFY hobby club.
- MOU with Lelogix Pvt. Ltd. for Design Solutions.

### Evidence of success:

Branch wise Placement Statistics of 2016, 2017 and 2018 batch

Year	2015-16	2016-17	2017-18
No. of Students Placed	517	591	733

### Challenges and Resources Required

Some of our students are from rural Uttar Pradesh. Those students when enrolled in the first year feel difficult to get accustomed academically to the engineering curriculum. It is a challenge to mentors in bringing confidence among the students. Balancing the academics with that of employability skill development program is a great challenge faced every year.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for 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: "National Leadership in Human Resource Development, Excellence in Education and Impacting Society Through Globally Competent Technologies"**

As per the vision of the institute, we intend to be a leader in Human resource development in the country. Institute aims to achieve this by providing quality education, taking innovative initiative and promoting the entrepreneurial spirit.

The distinctive performance of the Institute which is aligned with its vision is the academic excellence by dint of teaching-learning process as the Institute would like to see itself as a leading one in engineering education and Human Resource Development as enumerated in the Vision statement.

The salient features about teaching-learning process, which is considered a priority and thrust area are described below:

The Institute prepares its own Academic Calendar well in advance before the start of the semester, considering the Gazetted/Restricted holidays and University schedule. It includes specific dates for conduction of two theory sessional tests, one Pre University test, weekly Monday tests for first year, completion of syllabus, Internal Practical examinations, co-curricular & extra-curricular activities, annual intercollegiate fest, sportfest, etc.

Subjects are allotted to the faculty members for the forthcoming semester immediately after the end of the previous semester looking into the faculty specialization, experience and workload.

It is ensured that the minimum contact hours for theory & laboratory as per university scheme is maintained in spite of unforeseen /unscheduled holidays. In addition to traditional teaching-learning methodologies, the Faculty members adopt group discussions, relevant MOOCS Video sessions, seminars, mini projects, PPTs, real time examples, simulations, Quizzes, etc depending on the course. This creates the best learning environment for the students to make them think critically.

Difficult subjects are identified based on previous results for which extra emphasis is given in terms of tutorials etc.

The institute also aims at vitalizing the learning skills with a focus on futuristic demands, vitalizing teaching learning process, ICT, Human Values, and functional relationship with all the stakeholders for the holistic development of the individual and society. It also strives to create virtuous, meritorious personells to serve the humanity by setting a commendable tradition of initiative and imagination. The institute stands apart from its counterparts by placing greater emphasis on producing professionals by providing value-based education and enabling them to face challenges of modern life. The institute is ranked among the Top 10 Engineering colleges in Uttar Pradesh. Institute always motivates its meritorious student by felicitating them with cash awards and takes extra care of its weak students by mentoring them. The placement cell is an integral part of the institution which ensures that all the students are well trained and

prepared to face various interviews held incampus/offcampus. The CDC keeps the students well informed about potential job opportunities and guide them from time to time. Soft skill Training is imparted to the students from their second year only. Institute has consistently maintained a placement of more than 75 percent . The academic and placement processes are complemented with a diverse array of opportunities provided to the students in enhancing their knowledge beyond academics. Various conferences, guest lectures, workshops, summits, celebrity chats are organized throughout the year to expose them to the outside world work ethics and all the recent developments and innovations. Students are encouraged to develop projects that can get funding from different funding agencies . Till date, the institute has received a grant of Rs.76 lakhs from different funding agencies for student projects. One of our MSME funded project in which cooking gas has been produced from the Sewage was appraised by thehonourablePrime minister of India and got huge media coverage throughout India.

To bring out the concealed talents of the students, every year the institution organizes an intercollegiate technical fest named “UDBHAV” wherein the students get an opportunity to compete with their counterparts from other institutes all over NCR and Delhi. The institution has provided the best possible facilities in terms of infrastructure for teaching, learning and sports activities for overall personality grooming of students. The institution has fully equipped auditoriums, open theatre, seminar halls, smart classrooms, grounds for athletics, basketball, indoor badminton courts& volleyball courts, billiards room and gymnasium facility for both boys and girls in their respective hostels. As a result, students have been performing very well in state and national level sports events and brought laurels to the institute.

Institute tries its level best to fulfill the need of the society by organizing different extension activities like blood donation camp activities as its contribution to the society. Students of the institute are also involved in one program that has been named as “Rope of Hope”. In this initiative, the students take care of the children from the weaker sector of the society in the neighboring vicinity educate them and provide them with free books and uniform,etc.

This is how, we at IPEC try to meet the vision of the institute.

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

## 5. CONCLUSION

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### Additional Information :

#### Additional Information :

The institution has been a recipient of various prestigious awards/achievements/recognition since its inception

- Ranked among **Top 8 Engineering colleges of Dr. A.P.J. Abdul Kalam Technical University, Lucknow**
- Institute received “**National Employability Award**” for 2 consecutive years **2013 and 2014** by **Aspiring Minds**.
- Chairman Er. S.S. Jain received the “**Edupreneur**” award **2013** by **Engineering Watch**.
- Institute received “**Best Educational Award**” **2013** by **International Institute of Education & Management**
- Institute is awarded by TCS for conducting “**World’s Largest Single Shift Digital Assessment**” with **Zero defects**
- **The Ministry of Micro, Small and Medium Enterprises (MSME) Govt. of India**, has chosen IPEC as **Business Incubator Center**
- **Five Entrepreneurship Awareness Camps (EAC)** have been approved for IPEC under the scheme **DST-NIMAT** project 2014-15.
- **Nodal Centre** of Value Education Cell of **AKTU, Lucknow** w.e.f. 2017-18
- Chief Minister of UP has sanctioned a research grant of **Rs. 4,58,000** to **Prof. Dr. V K Singh** in 2017
- **AICTE** has sanctioned **Rs.2,55,000/-** under **Research Promotion Scheme for year 2013-14**. Principal Investigator for the same is **Dr. K.C. Tripathi (Associate Professor, CSE Dept.)**
- Dr. APJ Abul Kalam Technical University has sanction **Rs. 1,00,000** to **Prof. Dr. V K Singh** as an **International travel grant for Invited talk in 17th International Conference on Computational and Mathematical Methods in Science and Engineering (CMMSE’17)** held at **Costa Ballena Golf & SPA, Cádiz, Spain** during 4th to 8th July, 2017
  - **Mr. Yash Agrahari** of B.Tech – ECE Branch has secured **4th Position** in University Merit List (2018 passout)
  - **Mr. Ashutosh Shivam** of B.Tech – EN Branch has secured **10th Position** in University Merit List (2015 passout)
  - **Mr. Apoorva Paliwal** of B.Tech – CE has secured **18th Position** in University Merit List (2014 passout)
  - **132 students(16% of registered students)** in B.Tech–I Year(2016-17) have secured more than 80% marks
  - **Limca Book of Records:** Civil Engineering Students made the longest paper bridge “SantulanSetu” having an overall span/length of 14.3m.
  - **2nd Position in World Skill 2016** for wildcard Competition (Electronics Skills) Prize of Rs. 75,000/- to each participant, organized by Ministry of Skill Development, Govt. of India

### Concluding Remarks :

### **Concluding Remarks:**

Inderprastha Engineering college (IPEC) stands as a synonym for quality education in the Delhi-NCR region. IPEC was established in 2000 by the parent trust of the institute "Shail Garg Shiksha Sansthan" to impart quality education to all the sections of society. IPEC was established in the year 2000 with 4 UG programs and in a span of 18 years, it has grown in leaps and bounds. At present, the Institute offers 6 UG programs & 3 PG programs with a total student count of 3173 (Academic year 2017-18). The Institute provides quality education in Engineering & Technology streams in the NCR region. There are many best practices being followed in the Institute. As a result, the Institute has made a name for itself in the region. Students from all over the country join the institute to pursue technical education. The management practices transparency and involves everyone in the decision making process for the upliftment of the institute. The students and faculty maintain excellent rapport resulting in a conducive learning ambience in the campus. The supportive management provides all the facilities that are required to carry out teaching learning process, research activities and industry collaboration.

The vision of the Institute is "National leadership in Human Resource Development, Excellence in Education and Impacting Society Through Globally Competent Technologies" and all efforts are being made to achieve the vision in the near future.

## 6.ANNEXURE

### 1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.3	<p>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</p> <p>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</p> <p>Answer before DVV Verification:</p> <table border="1"><thead><tr><th>2017-18</th><th>2016-17</th><th>2015-16</th><th>2014-15</th><th>2013-14</th></tr></thead><tbody><tr><td>4</td><td>4</td><td>9</td><td>2</td><td>3</td></tr></tbody></table> <p>Answer After DVV Verification :</p> <table border="1"><thead><tr><th>2017-18</th><th>2016-17</th><th>2015-16</th><th>2014-15</th><th>2013-14</th></tr></thead><tbody><tr><td>5</td><td>1</td><td>8</td><td>8</td><td>10</td></tr></tbody></table>	2017-18	2016-17	2015-16	2014-15	2013-14	4	4	9	2	3	2017-18	2016-17	2015-16	2014-15	2013-14	5	1	8	8	10
2017-18	2016-17	2015-16	2014-15	2013-14																	
4	4	9	2	3																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
5	1	8	8	10																	
2.4.2	<p>Average percentage of full time teachers with Ph.D. during the last five years</p> <p>2.4.2.1. Number of full time teachers with Ph.D. year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"><thead><tr><th>2017-18</th><th>2016-17</th><th>2015-16</th><th>2014-15</th><th>2013-14</th></tr></thead><tbody><tr><td>61</td><td>49</td><td>40</td><td>35</td><td>30</td></tr></tbody></table> <p>Answer After DVV Verification :</p> <table border="1"><thead><tr><th>2017-18</th><th>2016-17</th><th>2015-16</th><th>2014-15</th><th>2013-14</th></tr></thead><tbody><tr><td>60</td><td>49</td><td>40</td><td>35</td><td>30</td></tr></tbody></table> <p>Remark : Admission to Ph. D cannot be considered as Ph.D certificate.</p>	2017-18	2016-17	2015-16	2014-15	2013-14	61	49	40	35	30	2017-18	2016-17	2015-16	2014-15	2013-14	60	49	40	35	30
2017-18	2016-17	2015-16	2014-15	2013-14																	
61	49	40	35	30																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
60	49	40	35	30																	
2.4.5	<p>Average percentage of full time teachers from other States against sanctioned posts during the last five years</p> <p>2.4.5.1. Number of full time teachers from other states year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"><thead><tr><th>2017-18</th><th>2016-17</th><th>2015-16</th><th>2014-15</th><th>2013-14</th></tr></thead><tbody><tr><td>159</td><td>163</td><td>161</td><td>136</td><td>126</td></tr></tbody></table> <p>Answer After DVV Verification :</p> <table border="1"><thead><tr><th>2017-18</th><th>2016-17</th><th>2015-16</th><th>2014-15</th><th>2013-14</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>	2017-18	2016-17	2015-16	2014-15	2013-14	159	163	161	136	126	2017-18	2016-17	2015-16	2014-15	2013-14					
2017-18	2016-17	2015-16	2014-15	2013-14																	
159	163	161	136	126																	
2017-18	2016-17	2015-16	2014-15	2013-14																	

158	162	161	136	126
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Remark : The HSC/degree certificates of are required to identify that the teachers belong to other states and ocountries, not about certificates

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

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

Answer before DVV Verification : 7

Answer after DVV Verification: 2

3.3.3.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification : 6

Answer after DVV Verification: 0

Remark : Revised as per documents provided

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:

2017-18	2016-17	2015-16	2014-15	2013-14
1627	1218	989	717	467

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
1598	1218	989	717	467

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:

2017-18	2016-17	2015-16	2014-15	2013-14
20	13	10	8	7

Answer After DVV Verification :



2017-18	2016-17	2015-16	2014-15	2013-14
20	9	4	4	3

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
239.33	421.12	278.80	256.74	259.21

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
239.33	437.34	285.34	284.45	259.21

Remark : Revised as per the support audited state attached

4.2.3 Does the institution have the following:

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

Answer before DVV Verification : B. Any 3 of the above

Answer After DVV Verification: C. Any 2 of the above

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

Answer before DVV Verification : Yes

Answer After DVV Verification: No

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
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1438.15	1431.37	1652.17	1479.64	1299.29
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Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
0.00	105.90	517.28	442.97	0.00

Remark : Revised as per supporting audited statement considering maintenance of physical facilities and academic support facilities only

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
539	529	704	704	457

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
00	00	00	00	00

Remark : Supporting documents have no relevance to Government sanction letter. No Government letter provided

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

	<p>Answer before DVV Verification : A. 7 or more of the above</p> <p>Answer After DVV Verification: A. 7 or more of the above</p>																				
5.3.1	<p>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.</p> <p>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</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>99</td> <td>30</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> </tr> </thead> <tbody> <tr> <td>99</td> <td>30</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>	2017-18	2016-17	2015-16	2014-15	2013-14	99	30	3	3	3	2017-18	2016-17	2015-16	2014-15	2013-14	99	30	0	0	0
2017-18	2016-17	2015-16	2014-15	2013-14																	
99	30	3	3	3																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
99	30	0	0	0																	
7.1.12	<p>Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff</p> <p>Answer before DVV Verification : Yes</p> <p>Answer After DVV Verification: No</p> <p>Remark : Neither University Code nor weblink of the Code of conduct provide</p>																				
7.1.13	<p>Display of core values in the institution and on its website</p> <p>Answer before DVV Verification : Yes</p> <p>Answer After DVV Verification: No</p> <p>Remark : Supporting document is not considered as Core Values</p>																				

## 2.Extended Profile Deviations

<b>Extended Profile Deviations</b>
No Deviations