SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

ABES ENGINEERING COLLEGE

ABES ENGINEERING COLLEGE, 19TH KM STONE, NH - 09 (PREVIOUSLY NH - 24) DELHI - HAPUR BYPASS ROAD
201009
https://www.abes.ac.in

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

ABES Engineering College (ABESEC) was established in the year 2000 with just four academic programmes and an annual intake of 240 students. Since then the institute has progressed to have 08 under graduate programmes and 06 post graduate programmes with more than 4500 students and 450 teaching and non-teaching staff members at present. The institute has a lush green campus, spread over an area of 63859.39 square meter (15.78 Acres). ABESEC has gradually consolidated its position as an academic leader among its peers, which has been duly acknowledged at various forums by various academic and non-academic entities. The institute was honored with Excellence and Innovation in Engineering Education Award by the Indian Education congress in the year 2014 and Asia's Fastest Growing Private Educational Institute by World Consulting and Research Corporation.

The institute is affiliated to Dr. A.P.J. Abdul Kalam Technical university (AKTU), lucknow. The affiliating University acknowledged the consistent delivery of good academic results by awarding Uttar Pradesh Technical University (UPTU - which is now AKTU) Academic Excellence Award in the year 2008. The institute has been consistently securing top rank position among entire colleges affiliated to AKTU, in B.Tech 1st year pass results since 2015.

To promote the culture of research and development, the Institute regularly organizes conferences, symposium, seminars, workshops, training programs and professional development programmes. The institute believes in the practical oriented approach of learning through centre for excellence labs, industrial collaborations and consultancy projects.

The college is NAAC accredited, ISO 9001:2015 certified and NBA accredited in 04 B.Tech. programmes (Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering, Information Technology). The NIRF India ranking of the institute for the year 2020 lies in the Rank Band 201-250. The institute has achieved MHRD IIC 4.5 Star rating and ARIIA 2020 ranking between 51-75 in category of self financed institute, at the National level.

Vision

To take ABES Engineering College to such a level that, it is at par with the leading institutions of the world in providing leadership to the international education system and be amongst the top rated institutions of the world by providing a transformative education to create leaders and innovators embedded in traditional Indian values.

Mission

1. To create an ambiance for healthy teaching-learning process.

2. To nurture the students and infuse in them

a. A passion to excel professionally

b. A spirit to be of utmost use to the industry, corporate sector and the society at large

c. An intense desire to take challenging responsibilities and leadership roles

d. A craving to be wholesome good human beings

3. To develop an environment for creating new knowledge through research and by thriving to explore innovative ideas

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

The institute has a huge lush green campus and infrastructure to run multidisciplinary courses.

A well established, outcome based teaching and learning system exists with use of both physical and online mode.

Institute has robust industry academia interface which helps institute to run detailed training program and project-based learning which are aligned with contemporary need of industries. This well established system has improved placement, not only in terms of the number of offers, but the average package and the highest package offered has also increased substantially.

ERP enabled infrastructure saves lot of human efforts and allow human resources to invest their time in meaningful and productive work.

The institute promotes participative governance system and has developed efficient and time bound grievance redressal mechanisms.

Transparent HR policies are enforced to promote equality, research, innovation and to reduce ambiguity.

Progression in number of qualified faculty in terms of Ph.D., research publications, IPRs, Research and Sponsored projects, consultancy projects.

Institute has dedicated state-of- the art incubation centre having space of around 16000 sq. ft. area with all incubation facilities.

Institutional Weakness

The ecosystem for innovation & research has still a scope for improvement.

Being affiliated, the institute lacks academic autonomy

Limited PG students and interdisciplinary courses.

Institute lacks in faculty and student exchange programs.

Institutional Opportunity

Institute envisage autonomous status by continuously improving the quality and focus on achieving the target of betterment of students with agility.

Institute has energy and enthusiasm to showcase the innovative alertness and thinking quotient of budding graduate and post graduate by effective mentoring system.

Institute can develop the effective research ecosphere which excel due to the coherence of students and faculty members.

Institute is capable to run multidisciplinary programmes so that the intake of institute is improved as per the expectation of National Education Policy 2020

Institute has taken all necessary steps to enhance greater proficiency in soft skills among students which will take there proficiency to next higher level.

Our incubation center (i Nurture Incubation Foundation) will take up the students to the next level of entrepreneurship by providing support to establish startups.

5 villages are adopted under Unnat Bharat Abhiyan. The activities will increase for these villages as a part of our social responsibility.

Institutional Challenge

Institutes faces challenge while adopting any new curriculum or training program because it has limited rights to upgrade the existing syllabus in which few courses lack the industry connect and contemporary industry needs.

85% admission is through government entrance exam which follows minimum percentage criteria as decided by AICTE for being eligible to appear in admission test which limits the right to select quality students.

Examination & Evaluation process is designed as per the direction of affiliating university which limits the institute's right to set the standard of question paper.

Not all students belongs to well equipped IT enabled infrastructure at home, hence outcome of online classes and assessment does not give true picture of performance.

Higher grants from government bodies to government institutions poses challenges to match up with the facilities provided in those government colleges, so that we can attract more research in our arena.

The low academic fees with no support of grants from government posses the difficulties in running the

institute along with the question of sustainability.

The institute face challenges in Recruitment and retention of well qualified faculty members.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Being affiliated to AKTU, the institute has no control over the curriculum however senior members from our institution are in the board of studies (BOS) of the affiliating university. Though the curriculum provided by the university is comprehensive, the gaps in curriculum and the actual trends of the industry are properly bridged through the additional/value added program offered to the students. These gaps are identified through a well-defined feedback process involving the various stakeholders. These additional courses include specialized training run by various Centre of Excellences on the recent trends in industry. The departments regularly organize trainings, workshops, guest lectures, etc. which provide the knowledge beyond the curricular domain, as per the latest industrial inclinations. Majority of the students attend these programs and use the learning in projects, technical competitions, etc. The quality of student projects and industrial trainings/ internship is also ensured by a well-placed mechanism. This practice has given fruitful results in terms of excellent academic results and higher placements, with higher number of offers at higher packages.

The curriculum addresses crosscutting issues and offers courses relevant to professional ethics, gender sensitization, human values, environment and sustainability. The institute also organizes several relevant workshops, seminars, talks to enlighten the students.

The effective delivery of the curriculum is done by well qualified and experienced faculty members who extensively use ICT tools and latest pedagogy to enhance the learning experience of the students. The feedback for the curriculum delivery is regularly collected from the students to ensure quality of education as per the latest trends. Every effort is done to ensure that each pass out student from the institute, contributes significantly to society and country.

Teaching-learning and Evaluation

Since its inception, ABESEC is continually striving to improve the efficiency and effectiveness in Teaching, Learning and Evaluation Processes. The highly qualified and dedicated faculty members, together with a dynamic team of technical staff leave no stone unturned in instilling professionalism to the students, along with high held traditional values. Various modern pedagogies including experiential, individual, participative and collaborative learning create a student centric learning ecosystem to cater the diverse learning needs of the students.

Traditional teaching has been replaced with more innovative and creative ways of disseminating, sharing and facilitating knowledge acquisition in students. The usage of LMS, E-Content, Online assessment through quizzes and tests, Presentations and other assessment tools ensure a proper learning environment in the institute.

The institute has adapted the philosophy of Outcome Based Education, the PEOs, POs and PSOs for all the programs offered are well defined. COs of all the courses are clearly defined and a well established process for

the development and revision of COs is in place. The assessment process of all the courses is transparent and is aligned to the evaluation scheme of the affiliating university. Efforts are taken to identify Slow Learners and steps are taken for them as per their specific needs. The attainments of the courses and program is calculated using IonCUDOS software. The gaps are meticulously investigated and the action plans are devised accordingly.

The institute has taken suitable steps to explore the potential of ICT enabled teaching and learning and to maximize the use of LMS to ensure transparency in the teaching-learning process. Many reforms are introduced in the internal assessment system and the system is made robust and transparent with clear guidelines. Standard procedures exist for examination related grievance redressal. A well established Mentor- Mentee process is in place to provide counseling and guidance to the students as well as monitoring their academic progress. An established feedback mechanism is in-practice for the evaluation of Teaching - Learning Process and thereby necessary corrective mechanism is initiated based on the suggestions/recommendations made in IQAC and meeting regarding academic affairs chaired by the Director.

Research, Innovations and Extension

The Institute offers a strong platform to its stakeholders for research, innovation, and extension activities. To promote the research culture, institute has established dedicated departments including ORBITS (for encouraging industrial consultancy)   and iNurture (for incubation). These departments promote the out of box thinking and provide a platform to faculty members and students to innovate their ideas and convert them in projects/products. The students are engaged in consultancy projects based on real time industrial problems. Institute encourages faculty and students to undertake in-house and collaborative research projects in their domain as well as in interdisciplinary areas. The faculty members are promoted to pursue research and publish their work in refereed Journals and in National and international conferences. Institute motivates faculty members to organize and attend workshops, seminars, conferences etc. for updating their technical knowledge. Faculty members are provided with travel grant and support of registration fees for attending conferences and programs for self development. Several incentives and policies are in place for motivation of the faculty members. The institute encourages its faculty and students to establish linkages with industry and academia. MoUs and its related activities are a common practice in the campus. There has been a gradual increase in the tie-ups over the years. Various research grants through Govt./non-Govt. organizations are fetched over the years. Institute promotes the involvement of students in the innovations. Several workshops are organized on IPR resulting in publishing and grant of appreciable number of Patents. The institute regularly organizes seminars/workshops through Industry people to spread the awareness about IPR and entrepreneurship among the students. Students of the institute are prepared to learn their responsibility towards the society and utilize technical education in day-to-day life through various extension activities including blood donation camp, light the literacy, help us to help child, Unnat Bharat abhiyan etc.

With all the measures initiated by the Institute, a large growth in number of research publications, patents, funded projects, consultancy work and industry collaborations is witnessed over the last few years.

Infrastructure and Learning Resources

The Institute has state-of-the-art infrastructure viz., classrooms, seminar halls, Auditorium, laboratories, Computing facilities, and the best in class hostel accommodation for boys and girls. All the classrooms, seminar halls, labs are air-conditioned and equipped with ICT facilities including PA system, LCD projector, LAN and

Wifi connection. The institute has a dedicated centre for teaching and learning with the latest facilities to create e-content for the students so as to promote, 'Any Time, Anywhere learning'. The laboratories have state of the art equipments which are regularly upgraded to comply with the current industry trends. The computing facilities are also regularly upgraded with latest configurations.

The college has a fully automated LMS integrated central library with over one Lac books in the lending and reference section. The Institution uses the digital platform for learning resources such as NPTEL, E-journals, etc. With 1616 computers available for student usage, the student-computer ratio is well above the prescribed norms of AICTE. The internet bandwidth of 200 MBPS helps to get better Internet service to employees as well as the students. The institute has setup a high end solution for Virtual Desktop Interface (VDI) with the latest hardware of DELL-Vx Rail and software from Citrix. This solutions helps the students to access the Lab software from anywhere in the world through internet. The institute provides the facility of centralized printing to all the department through EPSON.

The large campus of 15.78 Acres, has state of the art flood lit cricket stadium; along with various other outdoor sports facilities like semi-olympic size swimming pool, football court, basketball, tennis, volleyball, Lawn tennis court etc. Good amenities are available for indoor games such as Snooker, Carom, Chess, table tennis and badminton.

Considering the Physical fitness and mental relaxation to be of prime importance, the institute has setup gymnasiums in hostels, equipped with modern facilities. A room dedicated for yoga sessions, and other spiritual activities is also available in the campus. The clubs such as Samvaad, the dramatics club and the cultural club's music wing have their own dedicated rooms in which the students can practice for upcoming events.

Student Support and Progression

The institute provides a strong support and progression system for the students, to ensure their employability enhancement and holistic development. The institute provides financial assistance to the deserving students by scholarships and awards through a well-placed policy. It also has a well-established support system to assist the students for the various Government/ Non- Government scholarships.

The institute has a dedicated Centre for Career Planning and Development (CCPD) for placement readiness of students. The team of CCPD is constituted of well qualified trainer who caters the need for training on technical and soft skill. The trainings on the overall personality development is taken care by the CCPD team. The institute has a dedicated language lab, where the students work on the communication skills. This well established system at ABESEC, has resulted in higher placement not only in terms of the number of offers, but the average package and the highest package offered has also increased substantially.

The students interested in pursuing higher education, are provided suitable guidance for the competitive examinations. The institute has a well placed policy to encourage the students to participate in cocurricular, extra-curricular activities. The students have been actively participating in such events and have brought laurels to the institute by their extraordinary performance at state and national level. The credit of nurturing talents to this level goes to the various clubs at the institute. These clubs are run by the student bodies under guidance of faculty members. Various tech fests, cultural fests and sports tournaments at institute level are organized by the students under these clubs.

The students have suitable representation in the institute level committees. The institute has a registered Alumni Association (AAA) having its South zone chapter in Bangalore to strengthen the relationship through regular meetings. ABESEC has a well-established ICC (Internal Complaints Committee) to deal with any grievance, and respond within a bound time period. The ICC has its own web portal for reporting of any such issue.

Governance, Leadership and Management

ABESEC was formed in the year 2000 under Society for Educational Excellence with a Vision to take the institution to the heights with its transformative education embedded in traditional values, and to create an ambiance for healthy teaching learning process. Quality Policies are framed and driven by the needs of the corporate world, society and stakeholders. The Board of Governance (BoG) comprises of academicians and industrialists of high repute. The Internal Quality Assurance Cell (IQAC) and Department Academic Committee (DAC) play significant role in the progressive growth towards its mission.

The Institute has defined structure with Roles and Responsibilities at various levels of academics and administration. The Institute practices transparent and participative governance at all levels. The institution firmly believes that feat to excellence is the accountability of every stakeholder and, everyone in the institution has a chance to contribute towards the strengthening of the processes.

Transparency is ensured by placing organizational structure, rules, regulations and procedures pertaining to recruitment, service, promotions and grievance in service rule of the Institute. The institute has a transparent HR policy, which is visible through its dedicated HR portal. All the leaves and regularizations are processed paperless, via the portal making the process easy and faster. A comprehensively designed appraisal system for the staff members is used for annual assessment. Staff Welfare is ensured through tangible and intangible benefits viz. EPF, ESIC, Mediclaim, etc. The staff is encouraged for personal growth and the financial assistance is provided, as per the well placed policies.

Adoption of e-governance has strengthened the administration of the Institute. All the issues related to IT and Admin are reported through a dedicated portal, this not only makes the process systematic but also makes the process faster.

The progress of the Institute is reviewed on regular basis for the effective implementation of Quality Policy and Plans. The Institution has well established Internal Quality Assurance Cell which plays a major role in inculcating quality culture in the Institute.

Institutional Values and Best Practices

ABESEC strongly believes in imparting value-based education, where students are fostered with admiration to gender equity, environmental consciousness, sustainable waste management practices, green initiatives, and professional ethics. The Administration and all the members of ABESEC, contribute to make the institute a clean, healthy and safe place for all, creating an inclusive atmosphere free from all discriminations.

Roof top Solar Plants of Total Installed Capacity of 500 KW are there in the institute as an alternative energy source as it believes that a proper eco-system needs to be created by practice. As in Dec'19; the Percentage share of the solar energy in the total consumption was 41.41%. Other than this, the institute also wheels power to the grid. Power efficient equipments such as LEDs, five star ACs and coolers are being procured to replace

old equipments. The Energy audit, green and environment audits are regularly done and all the relevant policies and suggestions are strictly implemented.

In addition, the waste management and proper sanitization of the campus is taken care by the administration. All the academic blocks are connected through footbridges and have all the other facilities to make the campus disabled friendly. The code of conduct for all is well documented and is disseminated through proper channels on the periodic basis. The Central Discipline Committee in the institute ensures the adherence of the code of conduct in the institute.

The best practices of the institute that has yielded excellent results are (i) Placement readiness of the students through extensive training and development process and (ii) Development of E-Content and extensive use of ICT in Teaching and Learning process. Institute's distinctiveness performance lies in skill enhancement & professional development of students, with which the institute strives to generate competent professionals and global citizens, who are informed about the needs of society and make the world a better place to live in.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	ABES ENGINEERING COLLEGE
Address	ABES Engineering College, 19th KM Stone, NH - 09 (Previously NH - 24) Delhi - Hapur Bypass Road
City	Ghaziabad
State	Uttar pradesh
Pin	201009
Website	https://www.abes.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Shailesh Tiwari	0120-7135112	9540987274	0120-7135115	info@abes.ac.in
IQAC / CIQA coordinator	Hemant Ahuja	0120-7135139	9899008275	0120-7135113	iqac@abes.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	13-07-2000

University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	**University name**	**Document**
Uttar pradesh	Dr Apj Abdul Kalam Technical University Uttar Pradesh Lucknow	[View Document]()

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	[View Document]()	15-06-2020	12	

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

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	ABES Engineering College, 19th KM Stone, NH - 09 (Previously NH - 24) Delhi - Hapur Bypass Road	Urban	15.78	63859.39

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Computer Science And Engineering	48	Intermediate	English	180	180
UG	BTech,Computer Science	48	Intermediate	English	180	180
UG	BTech,Computer Science And Engineering In Artificial Intelligence And Machine Learning	48	Intermediate	English	120	120
UG	BTech,Computer Science And Engineering In Data Science	48	Intermediate	English	60	60
UG	BTech,Electronics And Communication Engineering	48	Intermediate	English	180	180
UG	BTech,Electrical And Electronics Engineering	48	Intermediate	English	120	81
UG	BTech,Information Technology	48	Intermediate	English	180	180
UG	BTech,Mechanical Engineering	48	Intermediate	English	120	48
PG	Mtech,Comp	24	Bachelor in	English	6	6

	uter Science And Engineering		Engineering			
PG	Mtech,Electronics And Communication Engineering	24	Bachelor in Engineering	English	6	1
PG	MBA,Master In Business Administration	24	Bachelor degree course of minimum three years duration	English	120	73
PG	MBA,Master In Business Administration In Business Analytics	24	Bachelor degree course of minimum three year duration	English	60	14
PG	MBA,Master In Business Administration In Logistic And Supply Chain Management	24	Bachelor degree course of minimum three year duration	English	60	0
PG	MCA,Master In Computer Application	24	BCA or BSC or BCOM or BA of three year minimum duration with maths in intermediate	English	120	119

Position Details of Faculty & Staff in the College

Teaching Faculty											
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				28				56				168
Recruited	24	3	0	27	9	1	0	10	97	71	0	168
Yet to Recruit				1				46				0
Sanctioned by the Management/Society or Other Authorized Bodies				28				56				215
Recruited	24	3	0	27	9	1	0	10	124	91	0	215
Yet to Recruit				1				46				0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				135
Recruited	105	30	0	135
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				135
Recruited	105	30	0	135
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				61
Recruited	61	0	0	61
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				61
Recruited	61	0	0	61
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	24	3	0	9	1	0	13	15	0	65
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	111	76	0	187

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

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

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	**Male**	**Female**	**Others**	**Total**
	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
PG	Male	125	8	0	0	133
	Female	78	10	0	0	88
	Others	0	0	0	0	0
UG	Male	898	74	0	0	972
	Female	233	20	0	0	253
	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	50	62	58	80
	Female	12	8	15	13
	Others	0	0	0	0
ST	Male	0	2	2	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	251	285	246	320
	Female	82	61	49	40
	Others	0	0	0	0
General	Male	625	611	578	633
	Female	230	226	163	156
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		1250	1255	1111	1242

Extended Profile

1 Program

1.1

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

2019-20	2018-19	2017-18	2016-17	2015-16
607	570	616	616	616

File Description	Document
Institutional data prescribed format	View Document

1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
14	12	11	11	11

2 Students

2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
4365	4346	4393	4561	4611

File Description	Document
Institutional data in prescribed format	View Document

2.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
648	595	540	621	621

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2019-20	2018-19	2017-18	2016-17	2015-16
1199	1191	1262	1234	1242

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2019-20	2018-19	2017-18	2016-17	2015-16
252	264	298	302	307

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
241	229	297	301	297

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 102

4.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
2657.10	2588.70	2678.91	2093.88	1784.99

4.3

Number of Computers

Response: 1616

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

While revision and up-gradation of the syllabus is done at the University level, the college has a mechanism for effective, documented curriculum delivery. The college has well developed academic procedures as needed to provide the outcome-based education. These academic procedures are religiously followed and regularly audited by IQAC to ensure effective delivery of the curriculum and the documentation process. The semester commences with the preparation of academic calendar, in line with the University academic calendar, consisting of all information and dates regarding commencement of classes, last teaching day, working and non-working days, schedule of examinations and major events at the institute level to be held during the semester. The faculty members are then allocated the teaching load in accordance with the evaluation scheme provided by the affiliating University, followed by the time table. The time table is adhered to, so that the curriculum is delivered within the stipulated time frame. The complete delivery of the course is documented in form of a course file that includes course outcomes, course plan, delivery schedule and methods, assessment tools, details of students along with the identification of weak and advanced learners, Evaluation results etc. Innovative methods of teaching involving project-based learning, problem based learning and experiential learning are practiced to ensure well rounded development of students. Besides traditional lectures and seminars, infrastructure for the use of ICT in classrooms, like power point presentations, smart boards and audio-visual support are all available to make the delivery of the curriculum enabling and interesting for the students. Content beyond syllabus is also taught in order to make the curriculum delivery more holistic and effective. Tutorials are held with mentoring and participative learning encouraged. Internal assessment is done transparently with examined scripts shown to students. Inter-personal skills are enhanced through soft skills and Value Education. Extra hours are devoted to take remedial classes to ensure good preparation of students for University examinations. To bridge the gap between curriculum and Industry, Video lectures (from NPTEL etc), Guest Lectures by eminent personalities from different fields and Industrial Visits are planned. To further fill the gap, various short-term courses, Value added courses and Technical Trainings are conducted on prevailing/emerging technologies. Labs are updated and upgraded on a timely basis so as to maintain the pace of ever-changing practical aspects of engineering.

File Description	Document
Upload Additional information	[View Document](#)
Link for Additional information	[View Document](#)

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

The institution do adheres to the academic calendar strictly for the activities mentioned including the conduct of CIE. It is considered a crucial activity, as well-planned Academic calendar and its adherence creates a huge impact on the achievement of outcomes. It is the first communication with all the stake holders regarding academic and administrative scheduling for the ensuing semester. The academic calendar is prepared at the commencement of each semester (July/Jan). The first draft is prepared by the registrar by taking inputs from university academic calendar and other activities of the Institute. The same is then discussed with Director/Dean Academics/Asst. Dean Academics for further incorporations.

The process followed for finalisation of academic calendar is as follows:

- Before the commencement of the session, the affiliated University (Dr. A.P.J. Abdul Kalam Technical University) notify the academic calendar of the University which includes dates for Even & Odd Semester commencement, Submission of sessional marks, University examinations (Theory & Practical), Evaluation, winter/summer vacations etc.

- The registrar of our Institute then requests all the head of the departments to share dates of events which are being planned at Institute level by the departments, during the incoming semester.

- The registrar then prepares a draft academic calendar before the commencement of each semester in the month of July/Jan in accordance to University academic calendar and the information received from all departments.

- While preparing the academic calendar it is ensured that number of required teaching hours mentioned by the University should be available during the semester through academic calendar. It also includes the dates for major events of Institute like cultural & technical fest, sports events, last teaching day, internal examinations, list of holidays or any relevant major event planned by the departments/Institute.

- A meeting is then convened by registrar in presence of the Director with all Head of the Departments, Vertical Heads, Functional Heads, Head of Central Exam committee and the management representatives where the calendar is put forward for final approval and suggestions.

- After incorporating all suggestions and final approval, the academic calendar is disseminated among students, staff, faculty members through email by the Registrar. Same is also uploaded on college website for easy availability to all the stakeholders.

- It is ensured that all academic and non-academic departments strictly adheres to the academic calendar.

- Once the academic calendar is finalised, approved and disseminated, no change is permitted. Only the Director can warrant any change in case of unforeseen circumstances.

File Description	Document
Upload Additional information	[View Document](#)
Link for Additional information	[View Document](#)

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

     1. **Academic council/BoS of Affiliating university**
     2. **Setting of question papers for UG/PG programs**
     3. **Design and Development of Curriculum for Add on/ certificate/ Diploma Courses**
     4. **Assessment /evaluation process of the affiliating University**

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	[View Document](#)
Details of participation of teachers in various bodies/activities provided as a response to the metric	[View Document](#)
Link for Additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

1.2.1.1 **Number of Programmes in which CBCS / Elective course system implemented.**

Response: 14

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link for Additional information	[View Document](#)

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 147

1.2.2.1 **How many Add on /Certificate programs are offered within the last 5 years.**

2019-20	2018-19	2017-18	2016-17	2015-16
28	42	33	27	17

File Description	Document
List of Add on /Certificate programs	[View Document](#)
Brochure or any other document relating to Add on /Certificate programs	[View Document](#)
Link for Additional information	[View Document](#)

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

Response: 34.89

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

2019-20	2018-19	2017-18	2016-17	2015-16
1788	2259	2037	1269	337

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	[View Document](#)
Any additional information	[View Document](#)

1.3 Curriculum Enrichment

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

Response:

The curriculum provided by the affiliating University (AKTU) is comprehensive and integrates sufficient

courses to address the crosscutting issues relevant to professional ethics, Gender, human values, environment and sustainability. There are total 32 courses (Details attached as additional information) relevant to these issues.

Besides curriculum our Institute endeavours to organize additional activities/ programs/ events to make the students aware of their surroundings and maintain healthy environment for all. Sufficient committees/clubs/cell as mentioned below, are established in the Institute to take care of these crosscutting issues.

- **Value Education Cell:** Recognized by the affiliating University as nodal centre for value education since December 2015.
- **Internal complaint committee (ICC):** Established under the Act No.20 of 1990 of Govt. of India.
- **Environ Club:** https://www.abes.ac.in/lifeabes-ec/clubs/environ-club/
- **Dramatics Club:** https://www.abes.ac.in/lifeabes-ec/clubs/samvaad-theatre-dramatics-club/
- **Unnat Bharat Abhiyan:** https://www.abes.ac.in/unnat-bharat-abhiyan-uba/

The lists of events conducted by these committees are listed as under:

- **Human values & Professional Ethics (HVPE):** Sensitizing students on HVPE is one of the objectives of the value education cell. The students when admitted to the college are introduced to HVPE through various sessions during the induction program. Several other workshops are conducted for the 2nd, 3rd & 4th year students. As a practice during these workshops the student volunteers are selected and they carry the responsibility of awareness of HVPE among the students. Various staff and faculty development programs/conferences are also conducted by Value Education cell. The faculty and staff members are also encouraged to join programs related to HVPE, outside the Institute as well. Being the nodal centre, the VEC members deliver several sessions outside the Institute as well.
- **Gender Sensitization:** ICC organizes several programs for sensitizing the students to gender related issues. Few of the recent organized programs include webinars/seminars on Gender equality, Women empowerment, Gender sensitivity & harassment. The dramatics club also conducts plays relevant to the gender sensitization. Few of the plays organized include *"Kaal Kothri", "Ek Khwaab Adhoora Sa", "Kahani Teri Meri"* which conveys a message to students regarding gender equality.
- **Environment & Sustainability:** The environ club has an objective to spread the awareness related to environment and sustainability among all the stake holders. To address the environment related problems and sensitize students. The environ club conducts activities like tree plantation (herbal garden), cleanliness drives within and outside campus, poster making completion, awareness programs for ban on plastic, waste disposal, water logging and conservation of water etc. Many other programs are conducted through UBA as well, to educate the stake holders in these crosscutting issues https://www.abes.ac.in/unnat-bharat-abhiyan-uba/.

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

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 3.93

1.3.2.1 **Number of courses that include experiential learning through project work/field work/internship year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
32	21	24	20	22

File Description	Document
Programme / Curriculum/ Syllabus of the courses	
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 73.36

1.3.3.1 **Number of students undertaking project work/field work / internships**

Response: 3202

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	
Any additional information	

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1.4 Feedback System

1.4.1 *Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni*

Response: A. All of the above

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

1.4.2 Feedback process of the Institution may be classified as follows: Options:

1.Feedback collected, analysed and action taken and feedback available on website
2.Feedback collected, analysed and action has been taken
3.Feedback collected and analysed
4.Feedback collected
5. Feedback not collected

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

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 91.61

2.1.1.1 **Number of students admitted year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
1250	1255	1111	1242	1274

2.1.1.2 **Number of sanctioned seats year wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
1440	1320	1194	1374	1374

File Description	Document
Institutional data in prescribed format	[View Document]
Any additional information	[View Document]

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 41.59

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

2019-20	2018-19	2017-18	2016-17	2015-16
239	249	229	277	262

File Description	Document
Average percentage of seats filled against seats reserved	[View Document]
Any additional information	[View Document]

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

The institution pays serious attention to cater the diversity amongst students as they come from diverse socio-economic backgrounds and medium of instruction during 10+2 education. For bridging the gap between the students and to provide a common learning platform, it becomes foremost necessary to assess the learning levels of the students.

The process of segregating students at ABESEC on the basis of leaving level is different for various years of study. The students are identified as slow, moderate or fast learners on the following basis:

For B. Tech 1st Year, 2nd Year Lateral Entry and Master's program entry level:

The parameters considered are :

- Admission test score followed by technical and personal interview sessions for direct admissions and UPSEE Rank for students through counseling.
- The marks obtained in 12th (for 1st Year), in Diploma (for Lateral Entry) and in graduation (for Master's program)
- Class Test / Assignments/ Quiz Assessment
- Sessional Test Assessment
- Teacher's Assessment

The performance of the students is assessed in all the proceeding semesters and efforts are made to keep the students on the track of learning. Class coordinators are assigned in each section/class who consistently monitors the performance & progress of the students. The necessary actions regarding their performance is taken by the class coordinators in association with the other faculty members teaching the courses, students mentors, the head of the department and sometimes parents are also involved if the student looses the track of learning.

Focus is on to yield the need of special learners by conducting special programmes curated based on the learning level of the students.

Special Programmes for Slow Learners:

- Remedial Classes
- Provision of additional study materials
- Strong Mentor- Mentee- Parent interaction
- Psychological & Career Counseling sessions

The strenuous efforts done by the institution towards the slow learners has reflected in better students' understanding in their chosen domain, improved placements, improved University results, and pass percentage. The institute is consistently maintaining the highest pass percentage result in 1st Year, among

all the institutes affiliated to the same university, consecutively from last 5 years.

Special Programmes for moderate/Advanced Learners:

* College level financial awards and support to purchase books/membership
* Continuous monitoring and support to achieve academic excellence in terms of better placement at higher percentage, higher studies and University ranking.
* Ample opportunities to work on real time live projects.
* Motivation to pursue online certification programs from prestigious platforms like Swayam, NPTEL, Udemy, Coursera etc.
* Motivation to participate in International & National level technical competitions.
* Financial support to avail professional membership.
* Motivation to participate in co-curricular & extra-curricular activities.

Our meritorious students have brought innumerable laurels to the institution and are continuing to add new feathers to the cap of success.

File Description	Document
Upload any additional information	[View Document](#)
Past link for additional Information	[View Document](#)

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

Response: 17:1

File Description	Document
Any additional information	[View Document](#)

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The teaching-learning pedagogy is witnessing a paradigm shift since last few years. The chalk & talk teaching methodology is not sufficient for today's millennial learners. To cater to their learning quest, a profusion of student centric methods including active learning, collaborative learning, project-based learning, experiential learning, experimental learning, blended learning, and other innovative learning methodologies are being employed at the institute.

The institution strongly believes in regular improvising the teaching – learning pedagogy. Student centric methods are followed to enhance learning experiences and necessary teaching aids like LCD Projector in

class, smart boards for e-content development, online learning modules, LMS & collaboration tools are available in plenty in the institute.

The institute has employed best of the faculty members who keeps the students involved in teaching through various active & collaborative learning methods including role plays, flipped class rooms, blended lecture delivery, case studies, group discussions and problem based learning. The students are involved in problem based learning during lecture and tutorial classes where students work to solve various problems in groups. Various clubs are successfully working in the institute with the huge involvement of the students. Various activities are held through clubs, where students learn through participation.

Students are exposed to experiential learning through live projects taken from industry through our dedicated department called ORBITS. This department works to bridge the gap between Industry and Institute by bringing various consultancy projects through SME's. The academic departments have done various MoU's with the Industry to keep the students involved in real time learning. As per the curriculum, the students in all years need to pursue an internship or a minor project for which the institute approaches various Industry/corporate so that students are engaged directly with the industry. Industry experts and successful Alumni are often called for interaction with students in the emerging areas. Students are also taken to industry for visits so that they experience the real time work culture. The institute has established various centre of excellence where students get the hands on exposure through training and projects. The students also has to undertake the minor/major projects as per the curriculum for which faculty members take special interest and guide students not only for projects but to publish their work as well. Students have published several research papers and patents in supervision of the faculty members. Students are encouraged to participate in various project competition and they have bought levels to the institute by achieving top position in results. A dedicated centre for applied research is developed to promote students participation in project competitions and enhancing students learning through project work. The institute has setup central e-yantra lab and project labs in all the departments to facilitate the project based learning. The institute also encourages keeping add-on experiments beyond syllabus in each curriculum based labs. These add on experiments are based on the recent technology.

These methods have proven to be phenomenally successful in establishing lifelong learning and in developing interactive teaching – learning environment in the institute.

File Description	Document
Upload any additional information	[View Document](#)
Link for additional information	[View Document](#)

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

The use of ICT in the teaching-learning process at ABESEC has proven a great amount of addition towards promoting self-learning and helped the students to gain knowledge at their own pace. In the quest for "any time anywhere" teaching- learning experience, the college has advised the teachers to adopt the use of audio-visual aids in their lecture delivery. The same has been encouraged by introducing it in yearly

appraisal process. To achieve this, the faculty members have been using power point presentations, online quizzes and simulations in their lectures. ICT Tools and resources available in institution include LCD Projectors, speakers, printers, photocopiers, laptops, pen tablets, e-lecture recording studio, uninterrupted Internet connectivity through Wi-fi and LAN. E-resources and techniques used in institute include e-books and journals, educational CDs and videos, scholarly databases like Elsevier, IEI journals and NDL, Nalanda e-consortium and collaboration platforms like MS Teams, Google Classroom, Moodles etc.

Faculty member uses collaboration tools to share the study material and conduct assessment through tests, assignments and quizzes. Googlemeet, MS Teams and Moodles are used to conduct online lectures, whose recordings are shared with the students.

In an effort to promote self-learning, students are encouraged to prepare the power point presentations as a part of their assignments. This makes the teaching learning process a two-way process, involving both the teachers and the students.

To adopt more sophisticated ICT tools, several workshops/ training programs are conducted to understand the different tools to be used for multimedia material development for teachers.

College has established, Centre of Excellence for Teaching and Learning (CETL) to enhance the quality of teaching and learning process of faculty and students at the institute. CETL, has a YouTube channel with over 13.3K subscribers and more than 500+ videos have been uploaded.

During the COVID era, in order to compensate the academic loss of the students, the institute had recorded many lectures for the university, which were put on the university portal and were highly praised by top authorities at the university.

AKTU initiative, 'SWAYAM PRABHA', an educational channel was also started in which the contribution of ABESEC is quite remarkable.

Video contents developed by ABES faculty members were made available to all students of Dr A.P.J. Abdul Kalam Technical University, Lucknow online on University portal. In COVID-19 pandemic, thousands of students were benefitted from these videos. In this regard, the involved faculty members were issued letter of appreciation by Hon'ble Vice Chancellor

The labs were conducted through online mode where instructions were made through video conferencing. In few departments, experiments were performed by taking help of online Virtual lab, an MHRD initiative.

File Description	Document
Upload any additional information	[View Document](#)
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	[View Document](#)

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed

academic year)

Response: 22:1

2.3.3.1 Number of mentors

Response: 202

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	<u>View Document</u>
mentor/mentee ratio	<u>View Document</u>
Circulars pertaining to assigning mentors to mentees	<u>View Document</u>

2.4 Teacher Profile and Quality

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

Response: 104.78

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	<u>View Document</u>
List of the faculty members authenticated by the Head of HEI	<u>View Document</u>
Any additional information	<u>View Document</u>

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 17.53

2.4.2.1 **Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
58	63	52	39	32

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	[View Document](#)
Any additional information	[View Document](#)

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 5.74

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

Response: 1446.58

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	[View Document](#)
Any additional information	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

The institution is affiliated to Dr. APJ Abdul Kalam Technical University, Lucknow. Primarily, the mechanism of internal assessment is well defined in the ordinance published by the affiliating University. The excerpts from the same (Ref.: https://aktu.ac.in/pdf/syllabus/Syllabus1819/all/B.%20Tech.%20Ordinance_2018-19.pdf) are as follows:

"8. EXAMINATION

8.1 The performance of a student in a semester shall be evaluated through continuous class assessment and end semester examination. The continuous assessment shall be based on class tests, assignments/tutorials, quizzes/viva-voce and attendance. The marks for continuous assessment (Sessional marks) shall be awarded at the end of the semester. The end semester examination shall be comprised of written papers, practicals and viva-voce, inspection of certified course work in classes and laboratories, project work, design reports or by means of any combination of these methods.

8.2 The distribution of marks for sessional, end semester theory papers, practicals and other examinations, seminar, project and industrial training shall be as prescribed. The practicals, viva-voce, projects and reports shall be examined/evaluated through internal and external examiners as and when required.

8.3 The marks obtained in a subject shall consist of marks allotted in end semester theory paper and sessional work."

The institute however ensures that all the students are well aware of the examination and assessment guidelines. The same are communicated to the students during orientation programme and in classes through proper briefing by the faculty members and the class coordinators. The internal assessments are made transparent & robust by taking the following measures:

- The dates, frequency, marks and weightage of internal assessment tests are announced at the start of the semester through release of academic calendar. The academic calendar is communicated to all the stakeholders through website, mails and in classroom, directly to students during lectures.
- The examination schedule is well prepared by exam cell, before each exam, in advance and shared to the students via their official group mail id, official Whatsapp group and concerned class coordinators
- Seating plan and table marking is well prepared in advance and followed strictly. The flying team of exam cell ensures the adherence of the same and flawless conduct of the examination.
- The answer scripts of the students are evaluated within three days of the examination and the evaluated scripts are shown to students to have an idea of their performance in the test. If they come across any doubts, clarification is given which enables them to perform better in future.
- For Project Presentation, Industrial Trainings, Seminars and Minor Projects, evaluative rubrics have been developed to ensure that similar evaluation guidelines are followed by each examiner. These rubrics are circulated prior to the final evaluation to the students.
- After preparing the final internal/ sessional marks, the same are displayed on the departmental notice boards. If there are any grievances, the same are immediately resolved by the concerned faculty members.
- Being strict to the criteria as per the direction of Dr. APJ Abdul Kalam Technical University, Lucknow, complete transparency is maintained in internal assessment tests.

File Description	Document
Any additional information	[View Document]()
Link for additional information	[View Document]()

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient

Response:

The institute has centralized examination cell which constitutes members representing nearly all the departments. The Examination Cell is headed by the Controller of Examination (CoE) which along with the team conducts both internal as well as external examinations.

The Examination Cell looks after all the aspects of examination including planning, dissemination, implementation, conduction etc. The planning part is done by the Director, HoDs, Registrar and CoE as per the need and guidelines issued by the affiliating university.

In the whole process of internal examination there are some issues/grievances which are dealt in a transparent, time-bound and efficient manner.

1. Regarding Date Sheet: The date sheet of the internal examination (Sessional Tests & Pre University Examination) is prepared by the exam cell members taking into consideration the difficulty level of the subject. The tentative date-sheet is circulated to the academic departments for the review. The departments are supposed to provide inputs/issues within 2 days of receipt of the tentative date-sheet. After considering the valid inputs, the final date-sheet is circulated to the examinees and concerned departments (which may include Academics Departments/ Admin/HR/Hostel/CCPD/Registrar/DSW etc).

2. Regarding Late Coming of the Students during Examination: The students entry is not allowed after 30 minutes of the commencement of the examination. This is as per the policy of the External Examinations. In some cases, students having genuine issue, it is considered on the request basis as per the discretion of the CoE and Observers in External Examinations.

In Internal Examinations, these issues are jointly handled by CoE and Department HoDs.

3. Regarding Un-Fair Means Case (UFM):

a) External Examinations UFM Cases: As per the university UFM Guidelines, the UFM cases are to be communicated to the affiliating university and handled at their level.

b) Internal Examination UFM Cases: UFM cases reported during the Internal Examinations are forwarded to the concerned academic departments. Respective department resolves the issue/grievance/UFM in presence of the HoD and department exam cell members and take necessary action. The action taken communicated to the exam cell for reference.

4. Regarding Grievances in Question Paper: During external examinations, if a student raises any issue regarding the misprinting/errors/data not available in any question paper, then this issue is raised to the University Officials within 30 minutes of the start of the Examination. However, in case of internal examination if such issue arises, the same is resolved after consulting the subject teacher/Head of the Department within the 20 minutes from the report of the issue.

5. Regarding Grievances in the Marks Obtained: For external examinations, a student may opt for challenge evaluation or Scrutiny if he/she is not satisfied with the marks obtained in a particular subject. The procedure will be as per the latest notifications of AKTU regarding Scrutiny or Challenge Evaluation. For Internal Examinations, the grievances are handled at the departmental level with complete transparency.

File Description	Document
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

The institute had adopted the philosophy of outcome based education in 2014. The decisions related to curriculum, pedagogy, and assessments are determined by the program/course outcomes that the students must demonstrate at the end of the program or course. The Program Educational Objectives (PEO), Program Outcomes (PO) and Program Specific Outcomes (PSO) for all programs offered by the Institute are well defined and displayed at various locations in the college including respective departmental labs, seminar halls, faculty cabins, corridors etc. The Program outcomes are drawn from the institute Vision & Mission and the conceptual framework by NBA while the Programme Specific Outcomes (PSOs) are developed at the department level involving various stakeholders.

The Course Outcomes (CO) of all the courses is clearly stated, following a well-defined process for the development and revision. The course outcomes are developed and revised at department level, in consultation with senior faculty members and the head of the department. The course outcomes are mapped with the Bloom's taxonomy for developing the students' capabilities up to the level of mere understanding to creation. For most of the courses the Course Outcomes (COs) are defined by the affiliating University however the same are reviewed at the department level through departmental academic committee. For the remaining courses whose outcomes are not defined by the University, the course outcomes are defined at the department level.

The dissemination of the PEO/PO/PSO/CO to all stakeholders is also done through college website as well. The PEO/PO/PSO/CO are displayed on the college website which could be accessed through academic departments using the following weblink: https://www.abes.ac.in/academics/. A copy of PEO/PO/PSO/CO is also placed in the departmental files, course files as well as lab manuals and the same are discussed with the students on the 1st day of the course commencement.

The continuous effort in implementing the outcome based education in the institute has rewarded with the NBA accreditation of 5 B.Tech. programs viz ECE, CSE, IT, EEE and ME, under outcome based model during the last 5 years.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	[View Document](#)
Upload any additional information	[View Document](#)
Past link for Additional information	[View Document](#)

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

The institute has developed a well defined process for the evaluation of program and course outcomes. The entire process of CO/PO attainment is automated through IonCUDOS software successfully implemented in the institute (May be accessed through http://103.212.88.132/ioncudos_abes/login). The said software is properly designed on the OBE framework and as per NBA guidelines. The institute has defined the assessment tools for evaluating the attainment of CO/PO. The entire calculations are done through software however the parameters for the calculations are defined by the institute. The backend process of calculations is briefly defined as below:

CO Attainment Process:

Calculation of CO attainment includes two parts: direct & indirect assessments, weighted as per NBA guidelines.

In **direct assessment**, the attainment is obtained from students performance in internal and university exam marks with the help of following assessment tools:

Internal Assessment Tools

Component	Component of Evaluation	Assessment Type
Theory	Sessional Exams	Short & long Answer Type Questi
	Pre University Exam	Short & long Answer Type Questi
	Assignment/Quiz	Numerical, Short Answer Type Questi
Practical	Continuous Evaluation	Planning, analysis of lab skills, finishing
	Practical Examination	Viva-voce & Experiment Cond
	Lab Records	Data interpretation
Seminar, Project, Industrial Training, Internship	Power Point Presentation	Rubrics
	Hard Bound or spiral bound Report	Rubrics

Semester End Assessment Tools

Component	Components of Evaluation	Nature of Exam
Theory	University end Exams	Application Based, Evaluation based & Memory Ba
Practical	University End Exams	Viva- Voce & Experiment Conduction
Project	University End Exams	Demonstration, Viva – Voce & Presentat

Weightage to the Internal & External assessment is given as per the University evaluation scheme. The scope for comprehensive assessment in University examination is not possible therefore average based attainment method is used for the same.

For CO attainment calculations department assigns targets & attainment levels through DAC by taking considerations of NBA guidelines.

In the **Indirect assessment**, Course exit Survey is used for assessing the percentage of attainment. In the overall attainment, a weightage of 80% is given to direct assessment while 20% to indirect assessment.

ASSESSMENT PROCESS FOR PO & PSO ATTAINMENT:

The direct and indirect assessment tools are used for evaluating the attainment of POs & PSO. Overall attainment for POs & PSOs is calculated with 80% weightage to direct method & 20% weightage to the indirect method.

- **DIRECT METHODS:** These methods display the students' knowledge and skills from their performance through continuous assessments including sessional tests, assignments, presentations, project work and the end semester examinations. These methods provide strong evidence of students' learning. Mainly it consists of overall CO attainment of each course.
- **INDIRECT METHODS**: In this method, the feedback from the various stake holders is taken. The processes through which the feedback are to be collected with frequency of data collection is indicated below:

Process	Frequency
Graduate Exit Survey	Once a year
Employer's Survey	Throughout the year, during Placement Drives
Alumni Survey	Once a year or during visit to institute.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for Additional information	[View Document](#)

2.6.3 Average pass percentage of Students during last five years

Response: 95.06

2.6.3.1 **Number of final year students who passed the university examination year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
1134	1157	1226	1157	1151

2.6.3.2 **Number of final year students who appeared for the university examination year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
1199	1191	1262	1234	1242

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	[View Document](#)
Upload any additional information	[View Document](#)
Paste link for the annual report	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process
Response:

File Description	Document
Upload database of all currently enrolled students (Data Template)	[View Document](#)

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 118.35

3.1.1.1 **Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
38.7	60.5691	14.43314	4.65	0

File Description	Document
List of endowments / projects with details of grants	[View Document](#)
e-copies of the grant award letters for sponsored research projects / endowments	[View Document](#)

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 5.95

3.1.2.1 **Number of teachers recognized as research guides**

Response: 15

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 47.5

3.1.3.1 **Number of departments having Research projects funded by government and non-government agencies during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
6	6	4	3	0

3.1.3.2 **Number of departments offering academic programes**

2019-20	2018-19	2017-18	2016-17	2015-16
8	8	8	8	8

File Description	Document
Supporting document from Funding Agency	[View Document](#)
List of research projects and funding details	[View Document](#)
Paste link to funding agency website	[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

Institute is continuously striving to promote research and knowledge transfer amongst the faculty members & students. Institute believes in the concept of "Idea brings innovations", hence it keeps on promoting students and faculty members to build their skills, share and learn innovative ideas and implement them in the form of product/project.

The institute has implemented several policies to Promote research and innovation in faculty and staff:

- Attending conferences/FDPs/workshops etc, both at national and international level, with adequate financial support. (Annexure I)
- Reimbursement policy for membership of professional bodies in order to encourage faculty members and students to get required exposure to contemporary research and innovative practices. (Annexure II)
- Financial support for training & certifications for skill enhancement. (Annexure III)
- Financial support to file and publish patents. (Annexure IV)
- Incentive policy to write quality research papers, book chapters, books etc. (Annexure V)

Different verticals are also formed to excel in the domain of research projects, grant etc. These verticals are Orbit, Orish, DataRitz, ABES start up lab etc.

Institute believes in promoting the industry academia linkage. Industry experts are invited to share knowledge, problem areas, probable solution and ongoing technologies in the current market scenario. Institute has signed several MoUs with Industry and corporate houses.

The continuous effort in improving the ecosystem of innovation & research in the institute has rewarded with the Band C (51 -75) in Atal Ranking of Institutions on Innovation Achievements- 2020 (Annexure-VI), an initiative of Ministry of Education. Institute has also shown improvement in star rating in nationwide rankings of higher education institutes from the Institution Innovation Council (IIC). It was 3 star in 2019 which is improved to 4.5 Star in 2020 (Annexure –VII).

With promising and committed approach towards startups and incubators, institute was also selected as an implementing agency in Tide 2.0 (a scheme of MEITY, GoI- Annexure VIII) in the Group (G3) in year 2019. The institute is guarantee institute for Tide 2.0 and has setup an SPV (INIF) registered under section-8 to promote financial autonomy. The prime moto of this SPV is to envisage tech start up during the entire journey from idea to market. The categories are Entrepreneur in Residence, Grant and Investments.

The institute's aims to provide every student with the opportunity and platform to convert the idea from lab to land. With several Center of Excellence/specialized labs & Cisco Network Academy, a continuous thrust is developed in entire ecosystem to create, deliver and continuously improve the research quotient of the students and faculty members.

The invariably important combination of research thrust and skill enhancement has made our students more industry ready and employable in past years. The massive improvement in the number of patents, research paper publication along with PhD registrations in-past couple of years clearly indicates that a holistic, result oriented & transparent ecosystem of innovation is created with emphasis on peer to peer learning and effective transfer of knowledge.

File Description	Document
Upload any additional information	[View Document]()
Paste link for additional information	[View Document]()

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 56

3.2.2.1 **Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
20	7	15	6	8

File Description	Document
Report of the event	
List of workshops/seminars during last 5 years	
Any additional information	

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 2.13

3.3.1.1 **How many Ph.Ds registered per eligible teacher within last five years**

Response: 34

3.3.1.2 **Number of teachers recognized as guides during the last five years**

Response: 16

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

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 1.35

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

2019-20	2018-19	2017-18	2016-17	2015-16
154	122	65	25	18

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

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

Response: 0.77

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

2019-20	2018-19	2017-18	2016-17	2015-16
81	51	42	20	24

File Description	Document
List books and chapters edited volumes/ books published	[View Document](#)
Any additional information	[View Document](#)

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

Extension activities are the inherent core of ABESEC. These activities had provided exposure to our students which is not limited to scientific approaches but penetrates up to the interpersonal skills, understanding human & society as well.

Unnat Bharat Abhiyan (UBA): Five nearby villages have been adopted by the college under UBA. This has given an opportunity to our students to explore the challenges which a rural citizen is facing now a days e.g. sanitation, illiteracy, drinking water scarcity. The villagers were educated about effects of excess use of pesticides in the farming, ill effect of usage of plastic,benefits of renewable energy sources like solar etc. The UBA works to provide solution. Our students proposed the idea to some of the problems faced by rural citizen. The Government of India has selected the idea and accordingly given a grant to execute the project. The important thing which students learn out of this is "connect". A connect of books with that of practical problems, a connect of rural India with that of urban India, a connect of solution of rural challenges with government schemes like Ujwala. They further identified that the solution of many problem of rural areas is "Awareness".

Entrepreneurship Awareness platform funded by DST. Under this, we covered many districts like Hathras, Moradabad, Bareilly, Ghaziabad, Varanasi etc. Such outreach programs have induced the thrust of "exploring more" in our students and has improved the interpersonal skills of students.

NSS club of self-motivated volunteers who took part in various society-oriented initiatives. NSS club

organized various activities like Swachhta Pakhwada, Awareness Rally, Cleaning campaign, Afforestation, creating awareness of contemporary issues like education, cleanliness, Cancer and Heart disease Awareness (in association with Cancer and Heart care association). NSS has also run Cloth donation drives. Blood donation camps in the College facilitate up to 400 – 450 donated units which is sent to State Government Blood bank via Rotary club.

NSS club had brought behavioral change in our students. While working under banner of NSS, every student represents himself selflessly to the society. NSS club inspires students about the roles and responsibilities that every individual must perform in order to keep balance of society and develop a welfare state.

The celebration of International yoga day, Rashtriye ekta diwas, hindi diwas etc. enlighten every student about the Indian cultural heritage and values. The celebration of international women's day etc. inculcates the importance of roles, rights, responsibilities & gender sanitization in the behavior of students.

ABESEC have also supported a NGO viz. Help us to Help Child (HUHC). HUHC have performed numerous social activities like teaching, grooming etc. for the children living in slums.

Above activities are very helpful in building the character, responsible behavior, philanthropic instinct etc. of students. Thesequalities of students will further cumulate to build a progressive & happy nation.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

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

Response: 1

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

2019-20	2018-19	2017-18	2016-17	2015-16
1	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5 year	[View Document](#)
e-copy of the award letters	[View Document](#)

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Response: 135

3.4.3.1 **Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
24	37	34	26	14

File Description	Document
Reports of the event organized	[View Document](#)
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	[View Document](#)
Any additional information	[View Document](#)

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 71.61

3.4.4.1 **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
2514	3857	3925	3275	2332

File Description	Document
Report of the event	
Average percentage of students participating in extension activities with Govt or NGO etc	
Any additional information	

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 247

3.5.1.1 **Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
128	61	19	26	13

File Description	Document
e-copies of related Document	
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 42

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**

2019-20	2018-19	2017-18	2016-17	2015-16
10	12	8	6	6

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

The Institute provides state-of-the-art infrastructure and physical facilities for teaching and learning. Adequate number of classrooms, tutorial rooms, seminar halls and labs are available to accommodate the requirements of all the departments. In total, 81 air conditioned class rooms/LTs are available which are constructed as per the requirements given by AICTE. The class rooms are enabled with integrated ICT facilities including LCD projector, PA System, and LAN, as required. The entire campus is Wifi enabled. The classrooms are well designed and spacious enough with the provision of podium, white board and green board. To hold interactive sessions and activities, four seminar halls with the seating capacity of not less than 150 are available. The institute has a huge auditorium for conducting international and national events such as conferences, workshops, seminars etc. To encourage the usage of ICT tools and inculcate culture of blended (online/offline) education, the institute has developed its own studio with state of the art facilities including Smart Board, Video camera & Over head camera. The details pertaining to the classrooms, seminar halls, auditorium and studio are attached as Annexure-I.

The laboratories/workshops at ABESEC are developed as per the AICTE norms and the lay out, carpet area, furniture etc. are laid accordingly. Every lab includes the necessary infrastructure, adequate number of experimental set-ups, computers and peripherals required to deliver the specified curriculum. In addition to the curriculum provided by the University, the Institute offers content beyond curriculum to bridge the gap between industry and academia. For this purpose, additional experiments/equipments are provided in each lab and the institute has established (additional) specialized labs cum centre of excellence (CoE) to ensure skill-based learning and promote R&D. The CoE's are developed in association with the industries like IARTC (Industrial Automation Research & Training Centre) is supported by Rockwell Automation, Solar Lab by Sapro Electronics & Electricals Pvt. Ltd., virtual instrumentation lab by National Instruments and many more. Additional lab on recent innovation and technology like Data Analytics, Full Stack, Block Chain, RPA (Robotic Process Automation), Software Testing and Mobile Application Development also exists. These innovation labs provide platform to every individual to develop skill set to meet latest industry requirements. The details of curriculum labs and the additional labs are attached as Annexure-II. Every lab has a faculty in-charge and lab assistant to provide constant support as well as ensure the effective delivery of the lab.

The institute has Hi-tech computing facilities with latest software & hardware like PTC CREO 7.0 Educational Bundle, Mapple Sim 2017, packet tracer for conducting CCNA Lab, Wi-fi and fiber link with a speed of 200 MBPS, online UPS with more than 200 KVA capacity, Smart board, Document Camera, Dell VX Rail for conducting virtual labs. Campus is completely under CCTV surveillance to ensure safety and security of all students and staff. Computing facility with more than 2100 computers is available for the use by all the stakeholders. The details of computing facilities are attached as Annexure-III.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response:

The institute has planned its resources to provide an ecosystem to its students where they are encouraged to develop themselves in sports and cultural activities. The Institute has created infrastructural facilities in Games /Sports for both indoor as well as outdoor games to bring about all round development of the students.

Outdoor Facilities

A Large Flood lit stadium supports a wide variety of field games including Cricket, Football and Volleyball. There is proper pitch for the cricket matches along with a facility for net practice in the corner of the stadium. The stadium also provides the facilities for the athletic events. Other outdoor facilities include courts for Basketball, Volleyball, Lawn tennis and Badminton. The facilities are available in the institute as well as girls and boys hostel, for the day scholars as well as hostellers. The institute also has a semi Olympic size swimming pool with in the campus having all necessary facilities/accessories.

Indoor Facilities

The institute provides multiple playing facilities for Table tennis, snooker, Carom and Chess for all the students. The institute also has an indoor gymnasium facility separately for the boys and girls in their respective hostels.

Cultural Facilities

Many entertaining events all-round the year at the Auditorium, are arranged as part of cultural activities, in collaboration with the prestigious cultural clubs, Theatre groups and Musical bands to give the students an opportunity to show case their talent besides giving them a refreshing break from academics.

The institute has its own dramatic club called 'Samvaad' which regularly organizes Plays, Skits, Nukkad Natak often addressing the social issues. The Institute has provided a dedicated room for band practice to students, which has adequate facilities. Students with a passion for music and dance are encouraged to perform during Cultural Fest. Students do participate in the Intercollege, Intra-college and University level competitions and won many of them. Picturesque, the Photography club and Minerva, the Literary club also encourages students to follow their passion in their respective fields.

The Yoga club of the Institution often organizes the Yoga and meditation sessions for the staff and students in the institute. The institute has a dedicated hall for practicing Yoga and holding similar events.

Annual Fest

The Institute organizes a three day Inter college fest "GENERO". Many technical events from different streams including robotics, coding competitions, structural engineering are conducted in which the students participate with great enthusiasm. Many cultural events such as Drama, Dance competition, Battle of Bands are organized which provides a great opportunity to students to exhibit their talent with individuality and benevolence.

The students make best use of the sports, cultural & other facilities and practice to be the winning individuals/teams of the college. The students have brought laurels to the institute and proved their excellence in various Intra and Inter–Institute, University, regional and National level competitions. The details are already shared under the criteria 5.3 of NAAC SSR.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. *(Data for the latest completed academic year)*

Response: 90.2

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 92

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 29.27

4.1.4.1 **Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
154.01	647.19	864.56	863.04	750.60

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

Library being the central and most important place for students, faculty and staff members, it is maintained to the best at the Institute. The library at ABESEC fulfills all the needs of its stakeholders, pertaining to teaching and learning as well as the research activities. The library is housed in a sprawling space of 1635 sq. m with a reading space of 400 sq. m. To develop the capability of self-learning, the institute provides high class library facilities with more than 110000 books, 5100 E- Journal, 120 Journal (National & International) & 10000 E-Books, audio-visual materials with a seating capacity of 250.

Institute has fully automated library since 2006 with Wi-Fi enabled facility. To automate the library, Libsys was used as ILMS from 2014-2019. Recently (in 2019) the ILMS is migrated to SIM as it provides comprehensive features. The library has the subscription to National Digital Library (NDL) which has a collection of more than 6 Lac e-books available for use by all the stakeholders. The library also provides access to IEEE, Elsevier, Springer nature, ASCE, ASME, Emerald and Taylor Francis through Nalanda E-Consortium membership signed under AKTU. E-resources are accessible to every individual through remote login. As an initiative to go paperless, the entire working of library is made automated through Library management system in SIM.

About Library Management System

Library Management System helps in maintaining records of all library functions & manages the complete information of the library with the following features:

Cataloguing: It helps in creating a list of all bibliographic items such as short description, list of subjects, author name, Title m, Publisher and the classification. Printing customized barcode label also print this software.

Book Acquisition: It is for adding books in the stock of library. Book selection, acquisition and processing of books function in include this module.

Database Management: This module helps in maintaining and organizing the database of the library as well as keeping the records all the items in library.

Membership Module: This module keeps track of all important information of student, who has taken membership of library.

Circulation: Issue, return, reserve & reminder of book for a particular student through the software's interface & all transactions sent to users through the software interface to the registered email of users.

Report Generator: It helps in generating various reports like status of issued books, total members, books returned etc. It can generate various types of reports like over dues report, dynamic report, resource status report, transaction history etc. Generate customized report for library items, library inventory and library fine collection.

OPAC: Online Public Access Catalog, it is an online database of materials kept in the library. It allows the search for an item of our choice in the library. Student can also check the availability status of a particular book online.

Serial Control: It helps in receiving periodicals/Journals subscription detail. In this module, full record of journals is kept in the library and it also manages the non-receipt journals & reminder send to publisher.

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

    1. e-journals
    2. e-ShodhSindhu
    3. Shodhganga Membership
    4. e-books
    5. Databases
    6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 27.79

4.2.3.1 **Annual expenditure of purchase of books/e-books and subscription to journals/e- journals**

year wise during last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
26.93445	28.95158	16.13884	34.20806	32.72428

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Response: 3.27

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

Response: 151

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

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institution believes in regular up gradation of its IT facilities to keep pace with the changing needs of technology. The IT infrastructure at ABESEC is created taking in to account the requirements of all the stake holders. For proper upkeep and IT support, the institution has established a separate department known as Computer Administration Department. The institution provides 24*7 high speed internet connection through optical fiber link (leased line) and Wi-Fi with 165 access points all over the institute. A bandwidth of 200 MBPS is available to provide high speed internet connectivity. Institution has specifically kept two service providers (CJ Online and Netway) providing a leased line of 200MBPS each. This ensures the uninterrupted availability of net and provides a backup in case if any of the two networks fail. The facility of internet is also available to the student staying in hostel.

For computing purpose, the Institution has more than 2100 computer systems, 110 printers, 15 servers and 165 Wi-Fi access points. More than 500 CCTV cameras are installed at various locations of the Institute for surveillance & security. 176 LCD projectors, 140+ Amplifiers and 200+ switches are available for the use by all the stake holders. The complete details of IT infrastructure available as on date is attached as Annexure-I along with the details of infrastructure added in last five years as Annexure-II. The institution has a practice of regular upgrading the computer systems and other IT facilities. In last five years tremendous change in IT infrastructure is done like bandwidth is increased from 80 MBPS to 200 MBPS along with addition of 800 computer systems, 34 printers and 190 CCTV Cameras. To further strengthen the ICT Facilities, 85 projectors, 28 Amplifiers, 11 display panels, smart panel and 165 writing pads have been procured in last five years. Notwithstanding the above, Institution has also established a dedicated centre, CETL (Center of Excellence for Teaching and Learning), with state of the art recording studio. The studio includes the availability of smart board, video camera as well as document camera for recording of video lectures, along with the other necessary infrastructure. Every classroom in the institution has necessary ICT facilities available to ensure an effective teaching and learning environment.

Institution has purchased 4 Dell VX Rail Servers (Xeon (R) Gold 5120 CPU @ 2.20 Ghz, RAM 300 GB, HDD 4*2 TB 800 GB SAS, 12 GB SSD) for providing high end access to virtual labs for the students. To protect data access from intruder's 2 firewall are installed. Sophos XG43T is used for the same.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 3:1

File Description	Document
Upload any additional information	[View Document](#)
Student – computer ratio	[View Document](#)

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	[View Document](#)
Details of available bandwidth of internet connection in the Institution	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 31.53

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

2019-20	2018-19	2017-18	2016-17	2015-16
885.558661	736.98135	751.54827	751.61345	569.84986

File Description	Document
Upload any additional information	[View Document](#)
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	[View Document](#)
Audited statements of accounts	[View Document](#)

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

Response:

The college ensures optimal allocation, utilization, maintenance and upkeep of various facilities by following regular procedures and policies made for the purpose.

Laboratory: Proper allocation and utilization of the labs is ensured by the respective departments. Records of maintenance is maintained by lab assistants, Lab In-charge and supervised by the respective head of the departments. The maintenance work of the labs include calibration, repairing and maintenance of sophisticated lab equipment's which is done by the lab assistants of the concerned department. To get the equipment's repaired from the outside vendors, the requisition is raised through respective lab in charges, with the final approval from the head of the concerned department.

Library: The college has a fully automated central library with over 110000 books. The requirement of books is taken from the concerned departments, duly approved by the respective HoD. Suggestion box is installed inside the reading room to take users feedback for introducing new ideas regarding library enrichment. For proper operation of the library, Library Advisory (LAC) Committee is formed involving the main stake holders of the college. The LAC provides suggestions/feedback about the facilities of library for improvement/addition and the access of each section of library. The issues being faced by the students are also resolved through LAC. Other issues such as weeding out of old titles, schedule of issue/ return of books etc. are chalked out / resolved by the library staff with the due approval of the Librarian.

The maintenance of the reading room and stock verification of library books is done regularly by library staff.

Sports: Regarding the utilization and maintenance of sports equipment the college sports in-charge is deputed however for proper upkeep of the sports facilities like badminton court, volley ball court, cricket ground, swimming pool etc, the administration office is responsible.

Computers: College has a dedicated Department for Computer Administration (CA) which is responsible for the procurement, issue and maintenance of computers/laptops and related hardware. The connectivity through LAN/Wi-Fi, PA systems, audio systems in classrooms etc. are all maintained by the CA department. For computer or connectivity related issues, the college has an IT portal, through which the faculty and staff generate the token id and get their problems resolved (URL: http://itsupport.abes.ac.in).

General Maintenance: The administrative office (AO) with a strong admin team takes care of the complete maintenance and upkeep of the college infrastructure. College has an admin support portal for handling all the maintenance related issues. In case of issues related to physical infrastructure, the respective departments raise the problem through this portal and get the token id generated for their problems (URL: http://adminsupport.abes.ac.in). The administration office ensures the resolution to every token generated. Regular cleaning of water tanks, proper garbage disposal, pest control, landscaping and maintenance of lawns etc. is done by the admin office. College campus maintenance is monitored through regular inspections. Upkeep all facilities and cleanliness of environment in men's and women's hostel is maintained through Hostel monitoring committee.

Classrooms, Seminar Halls, Auditorium: Dedicated classrooms are allocated to all the departments at the commencement of each session. The seminar halls, conference halls and auditorium are the shared resources which are allocated on need basis. The requested for which is raised using the attached booking form (G1).

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 22.66

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

2019-20	2018-19	2017-18	2016-17	2015-16
827	911	1124	1070	1122

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	[View Document](#)
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	[View Document](#)

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 0.32

5.1.2.1 **Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
27	21	11	12	0

File Description	Document
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	[View Document](#)

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the

following

1. **Soft skills**
2. **Language and communication skills**
3. **Life skills (Yoga, physical fitness, health and hygiene)**
4. **ICT/computing skills**

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

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

Response: 41.59

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

2019-20	2018-19	2017-18	2016-17	2015-16
3010	2988	1073	982	1120

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

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

1. **Implementation of guidelines of statutory/regulatory bodies**
2. **Organisation wide awareness and undertakings on policies with zero tolerance**
3. **Mechanisms for submission of online/offline students' grievances**
4. **Timely redressal of the grievances through appropriate committees**

Response: A. All of the above

File Description	Document
Upload any additional information	[View Document](#)
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document](#)
Details of student grievances including sexual harassment and ragging cases	[View Document](#)

5.2 Student Progression

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

Response: 63.63

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

2019-20	2018-19	2017-18	2016-17	2015-16
892	907	778	641	671

File Description	Document
Upload any additional information	[View Document](#)
Self attested list of students placed	[View Document](#)
Details of student placement during the last five years (Data Template)	[View Document](#)

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 5.84

5.2.2.1 **Number of outgoing student progression to higher education during last five years**

Response: 70

File Description	Document
Upload supporting data for student/alumni	[View Document](#)
Details of student progression to higher education (Data Template)	[View Document](#)

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

Response: 8.52

5.2.3.1 **Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations,** *etc.*)**) year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
35	63	35	17	8

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

2019-20	2018-19	2017-18	2016-17	2015-16
356	656	424	210	117

File Description	Document
Upload supporting data for the same	[View Document](#)
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	[View Document](#)

5.3 Student Participation and Activities

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

Response: 143

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

2019-20	2018-19	2017-18	2016-17	2015-16
56	24	22	25	16

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

5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

Students Affairs Committee (SAC): The College has an active and dynamic student Affairs Committee (SAC) that involvesa huge participation of well represented student body. The committee discuss all issues raised by the students and make appropriate recommendation to the appropriate authorities. The committee meets as often as necessary, but, not less than twice in each semester.

SAC is an empowered committee which can take appropriate decisions or recommend the actions to the college authorities for support and action. The purpose of the Students Affairs Committee is to act as a channel of communication and dialogue between the college authorities and the students. The committee's main objective is to aid in establishing a bridge between the student and academic fraternity and the college authorities.

SAC consists of student representatives, faculty members and representatives from each department who are responsible for the proper functioning of the college.

Thecommittee is constituted with the following members:

- A senior professor nominated by the Director as chairman.
- One Faculty representative from each department.
- Students from each course & year, nominated by the Department.
- Few students from the outgoing SAC.
- Representatives from Admin office, Registrar, In-charge (Hostel affairs), Librarian,CCPD, Computer Admin Department**.**

In addition to the composition specified above, the chairman, SAC may make additional nominations to the committee.

The duties and the functions of the committee include smooth functioning of the collegeinvolving healthy

participation from all the stake holders and to address the issues/concerns raised by the students, faculty or any representative of the committee by making appropriate recommendation to the appropriate authorities.

Students also have representations in various academic and administrative bodies/committees of the college as mentioned below:

- Library advisory committee (LAC)
- Internal Quality Assurance Cell (IQAC)
- Class Representative
- Various Clubs (Cultural/Sports/Literary)
- Centre of career Planning and Development (CCPD)
- Disciplinary Committee
- ABESEC Alumni Association (AAA)
- Magazines and Newsletter Committee
- Professional/Technical Committees: ACM/IEEE/IEI/GMA/ACM-W
- Value Education Cell
- E-Cell
- Institution Innovation Council
- Genero / MCA / MBA Annual Fest

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 16.2

5.3.3.1 **Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
21	17	17	16	10

File Description	Document
Report of the event	[View Document](#)
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	[View Document](#)

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

ABESEC Alumni Association (AAA) was founded in 2007 with the objective to foster mutual benefits by promoting interaction between the Alumni, the present students of the college and between the Alumni themselves. All students, on passing out, become members of the alumni association. There are 12000+ members in the association as of now. The association is registered with the Registrar of Societies, Meerut with specified organization and bye-laws.

For efficient functioning of the association, the General Body meets annually and elects an Executive Council. On this occasion, college organises it's yearly 'Alumni Meet - Cum -Decadal Celebrations' to organize a get together in general & felicitate its alumni who graduated 10 years ago. AAA has a portal 'Alma Connect' (https://abesec.almaconnect.com/) to connect alumni with students & faculty. The Alumni regularly visits the College and their interaction with current students is organized by academic departments and AAA together. The Executive Committee consists of office bearers, executive members and departmental coordinators. The executive council meets at least once in two months to transact the normal business of the association. The faculty coordinators from each department are also invited to enhance the interaction of the students & faculty with the alumni on the subject of mutual interest and to develop a strong bond among them.

There has been immense contribution of the alumni towards career enhancement of ABESEC students. They have been helping students in following areas:

- Regular interaction to provide them insight about what industry expects from its employees, thus empowering them to acquire industry specific trainings and develop right aptitude and technical competence.
- Lectures/ seminars on latest technologies.
- Seminars to guide students for studies abroad.
- Guide students to prepare for various competitive examinations including IES and PSUs.
- Persuade their employers to send recruitment teams to ABES EC for campus placement.
- AAA is also supporting an NGO called HUHC (Help Us to Help the Child) which educates the children in slums & villages of poor downtrodden people.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

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

Response: A. ? 5 Lakhs

File Description	Document
Link for any additional information	[View Document](#)

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

To support the institute Vision i.e. to promote transformative education for creating leaders & innovators embedded in Indian Traditional values, the Governing body (BoG) always endeavors to develop a congenial environment for teaching and learning. The BoG welcomes the open exchange of ideas at various levels of hierarchy. The stakeholders are involved in the decision making process and the policy formations. The institute also believes in involving stakeholders in feedback about curriculum, teaching-learning processes and the initiatives taken by the institutions. To ensure effective and sustainable decision making, the institute follows open door policy. The Director and the Management always welcome the formal & informal discussion at various levels. The management of the institute never compromises on the human resource development and provides all the necessary infrastructure required for effective teaching-learning and keeping pace with the changing needs of higher education. The processes and working culture at the institute promotes quick decision & fast response in action avoiding delay & bureaucracy. The Institute BoG believes to upgrade and excel with the fast changing needs of technology. The institute believes in involving the industry and corporate for mentoring the students and infusing in them the passion to excel in the field of their interest. The industry and academia experts are often called to deliver talks, training sessions, workshops & webinars. The students and faculty members are regularly sent for visits to industry for understanding the real time processes and latest developments in the field. To promote consultancy and research, the institute has established a dedicated department. The institute policies and strategies are reflective to encourage a strong industry Academia relationship. The outside world participation of faculty & staff members is highly appreciated by the management of our institute and necessary financial support is provided for keeping the motivation level high. The Leadership of the Institute encourages the faculty and staff members to attend and organize seminars, workshops, conferences and training programs as well as take memberships of various professional bodies for their professional development. Faculty members are motivated to apply for Research projects and consultancy through different schemes of Government/non-Government and research organizations. Various incentives and policies are in place for motivating the stakeholders and creating a culture of research and development in the institute. Notwithstanding the professional development of the faculty, staff and students, the Institute also offers support for extension and outreach activities for their holistic development. To nurture the students and infuse in them the professional ethics, human values and positive attitude, the institute has established value education cell and various clubs.

The Management, Director, faculty and Staff members work hand in hand to achieve Vision and Mission of the institute.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Response:

The institution practices decentralization and participative management at various levels. The institution firmly believes that achievement of excellence is every stakeholder's responsibility and everyone in the institution at all levels has an equal opportunity to contribute towards improving the processes, leading to quality.

The Institute believes in promoting a culture of delegation of powers through the involvement of stakeholders at all levels of an organization in the processes of an analysis, strategy development and deployment. The top management is highly responsive, plans in a meticulous manner to utilize the resources optimally.The top management duly ensures the availability of the infrastructure and resources required for entire institutional practices. The Director of the institute is given functional authority by the Board of Governance to drive all the academic and nonacademic activities by involving the head of the various academic and non-academic departments and the faculty members.

The head of the departments have complete functional autonomy to decide on the various departmental activities by implementing them with the involvement of the faculty members. They have been empowered to propose departmental budget, course allocation, framing timetable, executing classes, organizing faculty, staff and student's development programs, national and international Conferences, arranging Industrial visits, talks etc. The director, Heads of the department, along with heads of various sections (Registrar Office/Library/Administration) are provided with the financial power delegation to run their day-to-day operational requirements within their own defined authorities. If, in any case the allocated financial power is utilized before the due time, additional financial power is also allocated. The Happay Prepaid Cards are provided to the heads which can be used for online transactions as well as to withdraw money from ATM.

The Recruitment / Selection Processes in the College isalso decentralized and carried out independently by the HR department. All department Heads convey their man power requirements, mentioning the positions and required qualifications. The HR department independently identifies the suitable candidates for recruitment through newspaper advertisements, websites etc. The HR department thereafter invites panels of experts and conducts the interviews. Selected candidates are invited to join the organization and HR department completes all the joining formalities i.e. verifying of credentials etc. The hired candidates are then transferred to their respective departments.

Various Administrative and academic committees have been established like Internal Complaints Committee, Students Affairs Committee, Central research Committee, Grievance Redressal Cell, Alumni Association, Entrepreneurship Cell, Anti ragging Committee , Clubs, NSS, etc. The constitution of these committees have representation from Alumni/ students/faculty/director/ industry professionals in various capacity which reflects the core cultural features of decentralized and participative management.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Institutional Strategy/perspective plan is reflected to achieve its goal of excellence by focusing on (but not limited to) the following areas:

Admission of Students: As per AICTE norms 15% of the allotted seats are to be considered as Management Seats and 85% of the seats is to be filled through UP State Entrance Examination (UPSEE counseling) conducted for admission in institution affiliated to Dr. A.P.J. AKTU. For admissions under Management Quota and Vacant seats of UPSEE counseling (Direct Admissions), applications are invited online from students.

Industry Interaction / Collaboration: To encourage Industry Interaction, the college has formed units like: 1. ORBITS (Optimized Research Based Industrial Technical Solutions): to help students to connect with the industrial world. 2. Data Ritz Technologies: It is an IT consulting initiative of the college to develop and design sustainable growth path for Industry, Startups, Research and Academia. 3. ABESEC Startup Lab (ASL): to expedite entrepreneurship amongst the students and faculty members through various programs and activities. In 2019, ASL was upgraded into separate legal entity under section 8 of companies act 2013 i.e INurture Incubation Foundation.

Human Resource Management: The College has a well-established HR department to manage human resource function. The HR department follows a 360-degree appraisal system to encourage the holistic development of its faculty members. The department ensures proper compliance with employment and labor laws. HR Software "greytHR" is used to view all HR policies, leave records, pay slips

Library, ICT and Physical Infrastructure / Instrumentation: Central library, which is well stocked with books, e-Books, National/International Journals such as Elsevier (Science Direct), ACM Digital Library, Institute of Engineers Online Journals, NDL (National Digital Library). Library is automated with ILMS for issuing/returning of books, accessing the database of books and periodicals etc. To support teaching learning, classrooms, Auditorium, Seminar halls, and Conference rooms are well equipped with LCD projectors, sound system, white boards, Wi-Fi/LAN.

Research and Development: Research policy encourages in terms of direction and quality of research, re-imbursement of expenses and support grants. Monetary incentives are offered to faculty members for publishing Patent, quality papers in National and International journals of repute, including SCOPUS and SCI indexed journals.

Examination and Evaluation: End Semester Examination and Evaluation is as per affiliating University guidelines by allotting test centers within district. Quality of Internal Examination is ensured by thorough

review and considering Bloom's taxonomy with course outcomes. The internal examinations are held centrally through exam cell.

Teaching and Learning: Faculty enlists the learning outcomes to be attained by the students and plans the delivery of the course through online mode, e-lectures or teaching in class. Delivery is done keeping the concept/principles/theory/problems in view. Further, quiz, assignments, group discussions, class tests, seminars, conferences, Guest Lectures, Visiting Lectures etc. are organized on contemporary topics throughout the semester.

In addition, to set clear goals with specific dates, the institute develops a five year roadmap. The road map helps the important stakeholders to align the institute activities with the long-term aspirations and stay on the track of development.

File Description	Document
Upload any additional information	[View Document](View%20Document)
strategic Plan and deployment documents on the website	[View Document](View%20Document)
Paste link for additional information	[View Document](View%20Document)

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Response:

The institute is contributing in building up the Nation by imparting quality education in the field of Engineering and Management. The quality is effectively maintained, which is reflected through various policies, administrative setups and procedures defined meticulously at the institution level. The Institute was established under the Society for Education Excellence and striving to be at par with the leading institutes. The philanthropic Governing council (Board of Governors - BoG) of Society of Educational Excellence is constituted of academicians and industrialist of high repute and involves members representing all the stakeholders. The BoG defines the Vision and mission of the college thereby setting the strategic directions for the college to achieve. The BoG has responsibility for fiduciary oversight and institutional performance. All of its decision and policies are made for the best interest of the institution, not for particular constituents. The Director of the Institute acts as the Member Secretary of the BoG and implements the approved policies and decisions of the BOG including budget. The Director is the academic and administrative head who monitors the overall functioning and growth of the Institute.

The institute has an internal organizational structure for effectivepleme imntation of its polices. The Institute has decentralized its operations and has delegated authority at various levels to ensure good governance. The involvement of the effective leadership is achieved through the well-defined system and organizational structure.

The administrative set up of the institute is constituted with Departments/Sections/various committee's like Academic council headed by the Director,

Internal Quality Assurance Cell (IQAC), Registrar office, Library, Optimized Research and Building Industrial Technical Solutions (ORBITS), DataRitz, INurture headed by their respective CEOs, ABES Alumni Association (AAA), Internal Complaint Committee, Value Education Cell,

Centre for Career Planning and Development (CCPD) including technical trainings, Students Employability Enhancement Program (SEEP) and Orrish Consulting headed by their respective heads, Finance and Accounts, HR, Admin and Computer Administration office

ABESEC strictly follows the service rules as stated by the All India Council of technical Education. Recruitment process is carried out according to the norms of the University, a body comprising of university representative, management representative, Director, external expert and head of the respective department decides the worthiness of the candidates by his/her performance in the interview. The teaching and non-teaching staff members are provided with the benefits of EPF, Gratuity, Mediclaim, accident cover, leave encashment, maternity leave and other benefits as applicable. The institution follows a well defined and transparent promotional policy based on Academic Performance Indicators (API). Stakeholders' feedback on improving quality of teaching learning process is taken regularly and implemented. The Institute has formed all statutory committees like Anti Ragging Committee, Internal Complaint Committee to help students and staff.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

The management of ABESEC believes that growth of the Institute is directly linked to the employee satisfaction and commitment. To maintain the high motivation and satisfaction levels, the Institute has defined many policies which ensure adequate welfare measures for teaching and non-teaching staff. The various welfare schemes and policies in favour of employees are as follows:

1) General Welfare Schemes for all (Faculty and staff):

- **Provision of Special Leave:** The Institute provides special leave including maternity leave and out duty leave, to facilitate all its employees as per the institute policy.
- **Leave encashment:** The employees can get their PL/EL leaves (beyond 30) encashed during the month of August, every year.
- **Fee concession policy for the wards of employee:** The institute provides fee concession up to 50% to the wards of employee who served the institute for more than 3 years.
- **Gratuity:** All employees are eligible for gratuity after completion of continuous service of minimum 5 years and is governed by the Gratuity Act in force.
- **Employee's Provident fund:** Employee's Provident Fund (EPF) is a retirement benefit scheme provided by the institution for the benefit of all its employees.
- **ESIC Scheme:** ESIC facility is provided to all its employees having Gross Salary less than or equal to Rs 21,000/- per month.
- **Mediclaim Insurance:** The Institute provides Medical Insurance of Rs 3,00,000/- to all its employees and family members covered under Group Medical Benefit Scheme.
- **Accidental Insurance:** The Institute provides accident Insurance to all its employees covered under Group personal accident insurance policy.
- **Sports and Gym facility** is available for the employees to maintain a healthy and balanced life.

2) Welfare Schemes for Teaching Staff:

- **Sponsorship Fee Reimbursement for professional development:** The Institute encourage faculty members to participate in various STTP/Workshop/FDP/conferences/certifications in India and abroad and provide financial support by reimbursing the registration fees as well as TA/DA. The institute also provides support to file and publish patents.
- **Fee Reimbursement for professional membership:** The Institute encourage faculty members to take membership of various professional societies.
- **Incentive schemes for contribution towards research and development activities:** The institute provides huge incentives for publishing papers in conferences and Journals.
- **Empowering teachers with personal computation facility:** The Institute provides Desktops and Wi-fi facility to every faculty/staff member and encourages them to use modern teaching aids.

3) Welfare Schemes for Non-Teaching staff:

- Sponsorship/Fee Reimbursement for Workshop/Trainings
- Special training for soft skills/Technical skills

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

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

Response: 42.44

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**

2019-20	2018-19	2017-18	2016-17	2015-16
217	144	61	105	50

File Description	Document
Upload any additional information	[View Document](#)
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	[View Document](#)

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

Response: 20

6.3.3.1 **Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
30	23	25	16	6

File Description	Document
Upload any additional information	<u>View Document</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	<u>View Document</u>

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 49.36

6.3.4.1 **Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
205	145	155	101	77

File Description	Document
Upload any additional information	<u>View Document</u>
IQAC report summary	<u>View Document</u>
Details of teachers attending professional development programmes during the last five years	<u>View Document</u>

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

The performance appraisal is done annually and systematically for all the faculty as well as staff members of the Institute, usually in the month of August. The performance evaluation is done as per the performance based appraisal system of institute and the related academic performance indicators. The non teaching and technical staff members are evaluated as per the key performance indicators. Institution has defined performance based appraisal form which includes all parameters important for the growth and development of every individual thereby leading to the growth of the institution. Parameters taken into consideration are

- **Aacdemics** which include various sub-parameters related to teaching-learning process, average and pass results of students, attendance of students in class and MOOCs attended by faculty members.
- **Professional Development,** which includes parameters like FDP/MDP/EDP attended, contribution towards industry academia collaboration, contribution in departmental activities like class coordinator, mentoring, time table in-charge etc.

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- **Research** which includes research publications in National/International Journals and Conferences, book, book chapters and edited book etc. Other parameters include consultancy/funded/sponsored projects, patents & copyrights, technology transfer, PhD supervisor etc.
- **Central Activities and E-Content development** are merged in the 4th category of parameters where assessment is based on the involvement of faculty in institute level committees and activities like admission cell, exam cell, IQAC, UBA etc.

Faculty members are given complete freedom to self-assess their performance and they are given an opportunity to justify their achievements.

Student Feedback is taken regularly both offline and online. The feedback received helps to assess the faculty performance on teaching, class management and other co-curricular aspects. Recommendations are prepared on the basis of rating and grading derived based on feedback and appraisal form submitted by employees. The respective head of the departments also assess the faculty members and write their recommendations on the appraisal form before submitting to the Director. The director and management then approve the appraisal. On the basis of the appraisal, annual increments are determined.

There is a separate appraisal system for staff which includes parameters like initiative taking and decision making capability, behavior and attitude, achievements, competency for future growth, learning ability, commitment, Quality of work and team work etc.

The performance appraisal system at ABESEC is very effective and helps the faculty/staff members in improving their performance, enhancing their professional growth and contributing to the institutional performance.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

College has an extensive account audit process. The College conducts internal and external financial audits annually. The institution has a Finance Section in its administrative setup which maintains and audits the financial statements regularly. The college has a mechanism for audit of financial resources from Qualified Internal Auditors and Statutory Auditors have been engaged; their team thoroughly check and verify all the vouchers of the transactions that are carried out in each financial year to monitor and report all the financial statements. The accounts of the college are audited regularly by Statutory Auditor for all required financial compliances. All the discrepancies noted and reported during audit are rectified / corrected and precautionary steps are taken to avoid recurrence of such errors in future. The institution has appointed as external auditor as mentioned: Mr. Sanjeev Agarwal, Charted Accountant (Member Ship no. 072907) of

M/s. Sanjeev Anand Associates, Ghaziabad (firm Regn. No. 007171C). The institution has appointed as internal auditor as under: Mr. Anil Agarwal, Chartered Accountant (Member Ship no.086952) of M/s Anil K. Associates (firm Regn. No. 004932C) to carry out Internal Audit of the college.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 15.07

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

2019-20	2018-19	2017-18	2016-17	2015-16
4.0723	7.522	3.473	0	0

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

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

Response:

Being a self financed institute, ABESEC mobilizes its funds received mainly from the students' fee. Funds received are spent on payment against salary to teaching and non-teaching staff, maintenance and augmentation of infrastructure and other recurring & nonrecurring expenditures of the institute under various heads as mentioned in the audited statement.

The budget is proposed by various departments, in the beginning of every academic session under different cost heads and taking previous year expenditure as reference. Cost heads cover wide range of activity related the field of Academics and overall personality development of Teaching and non-teaching staff which may include lab development, equipment purchase, travel and training, research and development, conferences, Seminars, faculty development programmes, projects and other important activities for enhancing the quality of teaching-learning and not just restricting to few conventional activities/practices. The process of budget proposal also helps in motivating faculty & staff members to be part of various

activities. It streamlines the work flow and approval process as well as gives maximum sense of responsibility and ownership to various departments. The overall institutional budget is prepared based on the budget proposals received from various departments, and other expected expenditures on maintenance and augmentation of the institutional infrastructure/resources.

Once the budget is finalized, the expenditures on various heads are done as per the policy and procedures of the institution. In case of any significant variances from the budget allocated; the approval lies at the sole discretion of the Management. The institute follows full transparency in use of funds.

The institute also mobilizes a small amount of funds generated through industrial consultancy and the grants received under various schemes from government and non government organizations, AICTE and the affiliating university. The funds received from these organizations are strictly spent against the specific heads under which the funds are received.

Optimum utilization of funds is ensured through maintenance of the expenditure records for every session under various Cost heads. Proper internal and external financial audits are in place to ensure the effective and optimal utilization of the funds against the sanctioned heads.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

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 primary objective of IQAC is quality enhancement through internalization of quality culture and institutionalization of best practices. Two IQAC initiatives which have contributed significantly in quality improvements are given in brief:

Identification of Key responsibilities Areas and Strategic Planning

At the institutional level, it is necessary to create congenial environment for development as well as creating a spirit in various departments to excel in all the areas. The Institute follows a practice to identify the key challenges for every ensuing session and define the key responsibility areas where the departments will focus. The key responsibilities of the departments are identified in such a way that all round development is seen at the end of the session. Some of the broad areas in which most of the academic departments endeavors includes academic results, students technical trainings and soft skill development, support for placements, faculty development, research & development, industry-institute interaction, accreditation etc. Once the key areas are identified, the departments present the same with a plan of action in presence of the Director and the management. The suggestions are provided by the Director and

management and necessary support required is granted. After the approval of the same, IQAC chalks out a plan of action with all the inputs from HoDs, Director and the Management. Review meetings on the achievements of the key areas are held to ensure that the plans are progressing in right direction. At the end of the session, HoDs present their final presentation regarding analysis of the achievements, future action plan, and correction required, if any.

Academic & Administrative Mentoring and Monitoring

The institute has well established mechanisms and quality practices for academic and administrative processes. The institute regularly updates the same for betterment. To further ensure the effective implementation, the institute regularly mentors the departments as well as monitors the processes taken up by various departments. The mentoring and monitoring is done in form of regular audits through a team of senior faculty members and the experts invited from the prestigious institutes in India. These audits are a deliberate attempt to consistently review and assess the performance of all the department, programs and facilities of the institution.

The IQAC draws up the schedule well in advance and informs all the members of the various departments. The instructions and objectives of the audit are made known to all concerned. A self-study report in is kept ready by the departments before visit, based on the well defined format by IQAC (attached as Additional information).

The objectives of the inspection are listed below:

- Review the functioning of department, associations, and facilities.
- To reinforce the healthy practices in the institute with suitable mechanisms to identify and reform.
- To see whether the quality practices are being implemented successfully.
- Motivate the faculty members to aim constantly at quality and self development.
- Help the faculty members, in all departments to use innovative methods in their classroom teaching and learning.
- Promote research culture at the grass root level.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

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 and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Since inception, IQAC has contributed significantly for institutionalizing the quality assurance strategies and developed various processes as follows:

- Enhancement of industry involvement in the academic process in terms of internship, guest lectures from industry, industrial visits, live projects etc.
- Strengthening of Outcome based learning Process.
- Focus on Soft skill development to enhance personality of students and employability.
- Participation in NIRF, ARIIA, NBA, ISO, AISHE and various other quality audits recognized by state, national and international agencies.
- Establishment of Institute Innovation Council (IIC) under MHRD.
- Beyond curriculum skill enhancement programs for higher level placements.
- Establishing Research and Development Culture by focusing on Research and Development activities.
- Conducting quality programs i.e., seminar, webinar, guest lecture, conference etc.
- Establishment of various processes to take feedback/ survey from various stakeholders. IQAC makes sure to act as per feedback received from various stakeholders.
- To implement and enhance the use of ICT tools to strengthen teaching-learning process.
- Establishment of the Mentor-mentee process and its effective implementation.
- To conduct the internal quality audits of various Academic departments, Library, Administrative department.
- To identify, develop, and implement the Best Practices for the whole Institution.
- To submit the Annual Quality Assurance Report (AQAR) annually to the NAAC.
- To coordinate the flow of information to the website administrator from various forums/ departments before and after the activities/ achievements.
- To institutionalize the best efforts to make the campus ragging free and to develop the discipline among students along with the establishment of grievance redressal at ABESEC.

To perceive learning outcomes, the IQAC periodically reviews teaching learning process and suggests gradual and regular expansion, upgradation and addition of the requisite material, equipment, infrastructure etc. With reference to the same, the institute has identified two examples of institutional reviews and implementation of teaching learning reforms facilitated by IQAC.

1. **Improving Teaching and learning process by adopting Outcome-Based Education (OBE)**

ABESEC as a higher education institution has always been striving for the academic excellence and that too with precise goals and objectives. To keep pace with the changing needs of the education and to develop an outcome based education system, the IQAC has made strenuous efforts.

The institute had adopted the philosophy of outcome based education in 2014. The decisions related to curriculum, pedagogy, and assessments are determined by the program/course outcomes that the students must demonstrate at the end of the program or course. The Program outcomes are drawn from the institute Vision & Mission and the conceptual framework by NBA. The course outcomes are developed and revised in collaboration with faculty, industry experts, and other stakeholders. The course outcomes are mapped with the Bloom's taxonomy for developing the students' capabilities up to the level of mere understanding to creation.

A result oriented, performance-based model is adopted at ABESEC that emphasizes on the accountability based on student learning. The core purpose of outcome based education is to focus on creating student-

centered learning environment and improving curriculum and pedagogy at the course level including curriculum and trainings. The role of the faculty at ABESEC is adapted as an instructor, trainer, facilitator and mentor, based on the outcomes targeted.

During the semester, the gap analysis is performed to find the gaps in learning of the students and at the semester end the attainment of learning outcomes is evaluated for each course as well as the program, with the help of dedicated software "IonCUDOS", procured for the purpose. The faculty members extensively use this software to find whether the targeted levels are attained or not. For low attained courses, proper action is planned and efforts are made to improve the attainments.

The continuous effort in implementing the outcome based education in the institute has rewarded with the NBA accreditation of 5 B.Tech. programs viz ECE, CSE, IT, EEE and ME, under outcome based model during last 5 years (Letters attached as Addnl. Info).

1. **Standardization of Academic Processes**

Though 100% standardization in academics is not possible, an effort is made by the IQAC at ABESEC to standardize the academic practices taken at the institute. Fundamentally, an instruction manual is developed that describes a set of rules governing how faculty and staff members at ABESEC should complete various academic activities. This manual includes a comprehensive summary of all the academic processes followed at ABESEC. The manual introduces the quality assurance and quality enhancement mechanisms of the institutes' education provision, and its policies and procedures to enhance teaching and the student learning experience.

The various processes defined by IQAC to improve the teaching learning process through the instruction manual are depicted below:

Preparation and adherence of Academic Calendar	
Preparation of Nominal roll, Attendance Sheets, and formation of sections/groups	
Choice of Electives (Open/Departmental/Science based)	
Course allocation	
Load chart and Timetable preparation	
Mentor-Mentee distribution	
Course Delivery (Online / Offline class)	
Course file development	
Lab file development	
Seminar Conduction	
Final Year Projects	
Industrial Training	
Monitoring of class delivery	
Attendance Monitoring of students	
Preparing Detained List	
Syllabus coverage	
Feedback & Surveys through stake holders	
Setting up question paper	
Conduction of internal examinations	
Dealing with the UFM cases	
Evaluation of answer scripts	

Slow and advanced learners	
Internal assessment and Uploading of marks on AKTU Portal	
Industrial Visits	
Guest Lectures	
CO-PO Attainments	
Departmental Academic Committee	

To effectively implement these processes IQAC conducts various meetings and academic audits from time to time. The academic audits and action taken thereof is a continuous process and the instruction manual is referred as a reference for all the audits. Some benefits reaped out of this process are as follows:

- Improved students results in all years
- The stringent academic processes followed has helped us in maintaining highest Ist year results consistently from last five years
- Boost in placements of students
- Quality projects and research papers/patents by students

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.5.3 Quality assurance initiatives of the institution include:

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
2. **Collaborative quality intitiatives with other institution(s)**
3. **Participation in NIRF**
4. **any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

Response: A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	[View Document](#)
Upload details of Quality assurance initiatives of the institution	[View Document](#)
Upload any additional information	[View Document](#)
Paste web link of Annual reports of Institution	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

ABESEC realizes the social responsibility as well its role in contributing to the cause of gender equity and has taken measures based upon the directions of GoI and self-consciousness in promoting the gender equity amongst the students and staff members.

ABESEC has a ICC (*Initially named as WWGRC (Women Welfare and Grievance Redressal Cell, Act 20,1990)*) formed under the 'POSH ACT' (The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013) which was enacted as a comprehensive legislation to provide a safe, secure and enabling environment, free from sexual harassment to every woman. The objective of the ICC is to form an inclusive atmosphere against any kind of gender biasness in the organization and enlighten the students and staff members about the gender equity both morally and legally. The committee also strategically takes steps for the empowerment of the females , focusing both personal and professional growth.

Details of Activities Organized by ICC/ WWGRC are available on Institute Website.

Various Measures have also been taken at the Institute Level to create the safe and healthy environment for all the students and staff members.

1. **Safety and Security**

- Possession of I- card is Mandatory within the campus for all students and staff members. The I Card strings are color coded as per the courses for quick identification. The outsiders' entry is prohibited.
- The major area of the Campus is under CCTV surveillance. Security Personals are available at the institute gate and are deployed at various locations in the premises to ensure safety and security.
- Hostels although are within the premises, have a *separate guarded entry checkpoint,* where *IN-OUT* details of each student is registered. Hostels also have experienced *female resident wardens and supervisors* to maintain discipline.
- A *well-equipped waiting room* is available at the entry gate of girls' hostel for parents /guardian of girl students.
- Health facilities: Girls' hostel has *separate gym. Sanitary napkin dispensing machine and incinerator* are also available for use. *First Aid Kits* are always available in the Warden office, in case of any sheer medical urgency; a dedicated *ambulance* is also available.
- The insitute has a statutory Internal Complaint Committee which looks after the matters related to safety and security of women in campus.

2. **Counselling**

- Although the institute has well established *Mentor Mentee system*. College has also appointed a

psychological counselor, to help the students and staff members in dealing with their problems. In addition to this, the students may take the online counselling sessions beyond college hours as well through YOURDOST - Online psychological Counselling System.

- HR policy of the institute is also as per the norms set by GoI. (In addition to these the female employees are given special leaves on occasion of 'Karwachauth', 'Teej', etc.

3. Common Room

- The Institute has recognizes the need for personal space for girls, especially in a co – educational Institution and has a separate room for the girls. This is very essential for them to interact, discuss with their friends and also rest if and when needed.

File Description	Document
Link for annual gender sensitization action plan	View Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

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

- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

The key activities held in the institute, have very less impact on the environment as the college is very self-conscious of generating less trash and reusing the waste it in all possible ways that enable the used material to be recycled ensuring that less natural resources are used. Waste generated on the campus is segregated as a solid waste, liquid waste, and e-waste.

1. **Solid Waste Management:**

   - The college generally has green waste in the form of grass and leaves, fruits and vegetable waste (peels etc.) from college canteen which is thrown in separate pits and used for making compost at a different site .
   - Most of the official communication in the institute is via E-Mails. The reuse of single sided blank papers/Paper bags/ Cups is also encouraged.
   - Solid waste is segregated as **biodegradable** and **non-biodegradable**. Separate dustbins are used for collecting the biodegradable and non-biodegradable waste across the whole campus.
   - College strictly adheres to , "*NO TO PLASTIC*" policy.

SOLID WASTE MANAGEMENT OF ABESEC
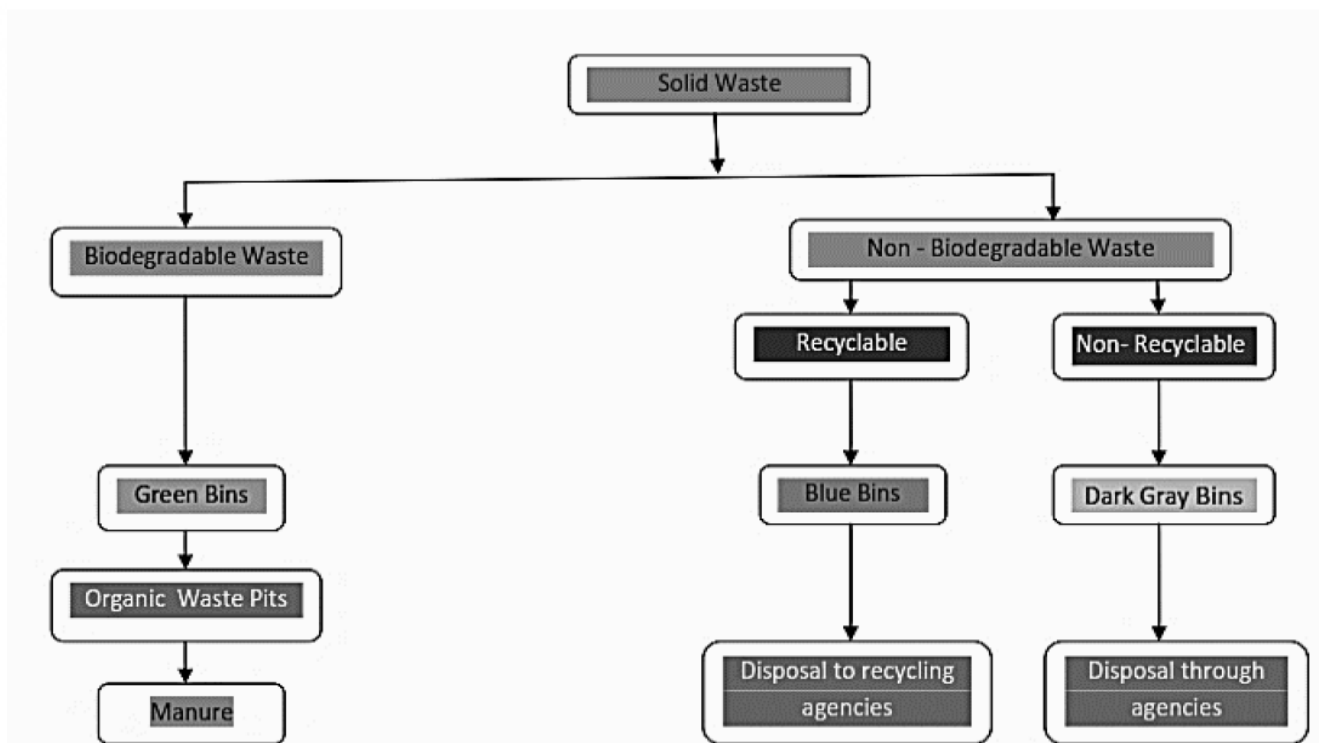
Disposal of Waste generated

(A) Biodegradable

- **Canteen waste**: The Canteen waste is being disposed to local Cattle Keepers to feed the waste to

their animals.

- **Leaves and others:** Leaves and others are used to prepare compost, which is used as manure in the Institute.Different methods such as pit composting, composting, are used to treat this waste. Paper waste is sold to Venders.

(B) Non-Biodegradable

This waste including metals, bottles, plastics, cans, broken glass wares, tins etc., are sold out to Local vendors. Authorities are instructed to dispose the Non-biodegradable waste to only Government authorized Venders only and keep proper accounting.

2. Liquid waste management

The institute has a well-built drainage system. Both treated and raw water are used in the institute depending upon the usage such as drinking and non-drinking purpose. The institute have the measures to recycle the waste water through ACs and Coolers by using it to water the plants.

3. Biomedical waste management

- As such no biomedical activities is generated through the regular activities of the institute, as all the programmes are related to Engineering and Management only.
- The sanitary pads are disposed through incineration i.e. burning at very high temperatures usually about 800? c, the waste is converted to ash, which is sterile, almost all pathogens are also destroyed.

4. E-waste Management

- E-Waste is disposed to Local Venders and proper records are maintained.
- The old equipment, such as desktops, Laptops, Printers are distributed among the staff members of the institute via different policies.
- Institute also has a policy of donating the used systems, printers to thesmall schools in locality and to the needy students as well.
- Parts of the old equipment are used for the repair of the other PCs, Printers, etc.

File Description	Document
Any other relevant information	View Document
Link for Geotagged photographs of the facilities	View Document
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document

7.1.4 Water conservation facilities available in the Institution:

1. **Rain water harvesting**
2. **Borewell /Open well recharge**
3. **Construction of tanks and bunds**
4. **Waste water recycling**
5. **Maintenance of water bodies and distribution system in the campus**

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.5 Green campus initiatives include:

1. **Restricted entry of automobiles**
2. **Use of Bicycles/ Battery powered vehicles**
3. **Pedestrian Friendly pathways**
4. **Ban on use of Plastic**
5. **landscaping with trees and plants**

Response: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document
Link for any other relevant information	View Document

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions / awards**
5. **Beyond the campus environmental promotion activities**

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	[View Document](#)
Certification by the auditing agency	[View Document](#)
Any other relevant information	[View Document](#)
Link for any other relevant information	[View Document](#)

7.1.7 The Institution has disabled-friendly, barrier free environment

1. **Built environment with ramps/lifts for easy access to classrooms.**
2. **Disabled-friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	[View Document](#)
Geotagged photographs / videos of the facilities	[View Document](#)
Any other relevant information	[View Document](#)
Link for any other relevant information	[View Document](#)

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

ABESEC provides a culturally inclusive environment with mutual respect, effective relationships, and clear exchange of ideas. People of all cultural & religious background work in harmony that is safe from mistreatment, harassment, or unfair condemnation. Everyone has freedom to express their own opinions and given equal opportunity to participate in teaching, learning, work and social activities in the institute.

- The institute maintains complete transparency in the admission process and all direct admissions are done on merit without any bias. Equal opportunities are provided to the students in various activities conducted throughout the session irrespective of their caste, creed, religion and region. The institution has an active student council and NSS wing to inculcate a sense of unity, discipline

and harmony. The institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion and regions are studying in the college without any discrimination. There is no segregation of students on the basis of their lingual or communal background.

- The anti-ragging cell of the institute acts as a key factor in maintaining tolerance and harmony among students. For the last decade there is not even a single incidence of ragging which shows the efficient working of the cell. Grievances redressal committee is also constituted to address the grievances among students and staff members and have not seen any grievances related to diversity till date.
- Various cultures are represented during the fests which depict sense of respect towards all the cultures. Sports, cultural and technical activities are organized inside the college to promote harmony towards each other. Annual Tech-Cultural fest is organized every year.
- To develop tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities, ABES EC has established various clubs. These clubs organize different events in around the year.
- Cultural Club organized dance, singing, fashion show competition. To promote Indian Culture we associate with SPIC MACAY, which organizes Indian traditional dance like Bharat Natyam, Purulia. Indian artists of international repute like Ms. Gauri Diwakar, and Ms. Ragini Chandershekar had graced ABESEC auditorium stage with their performances.
- Spirituality and Yoga (SYC) club organized spiritual events like promotion of Yoga and Meditation by R J Raunak, a session on "Facing uncertainties" by Brahmakumari. International yoga day is also celebrated and organized by the SYC.
- Institutes dramatics society "Samvaad" have presented many plays addressing many social issues. Some of them are'Kisse Kahaniya', 'Ea kkhwab Adhoora sa', 'Bheedke Bashinde', 'Oo Re Womaniya', 'Agar tum mil jao'.
- NSS Club organized Blood Donation Camp, Swachhta Pakhwara, Clean Campus Day, Clean Surroundings Day, Cancer Awareness Program, and Clothes Donation Drive, Ghaziabad Kachra Samadhan Mahotsav.
- Regional events are also celebrated at the institute especially Janmashtami, Navaratri, Diwali, Christmas in which students, faculty and management participate together. Departments celebrate Vishwakarma Day by doing Pooja in their workshops and labs for invoking the blessing of almighty.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Link for any other relevant information	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

In the present scenario identification of Humane Values and living with Ethical human conduct can stipulate sustenance of nurturing societal values, definite human conduct and awareness of the same in young minds/professionals. To meet this objective, we at ABESEC, as Value Education Nodal Center, conduct regular workshops for its students, faculty and staff members. The outcome of conducting these workshops is visible through the changing behavioral patterns and work efficiency. The institute has also witnessed a remarkable change in the attitude of the participants. To develop this competence among engineering aspirants we lay the foundation of Values at the very onset of engineering education through-

1. **Student Induction Program (SIP) on 'Universal Human Values'** – For developing a holistic world view, this program is to sensitize students about their Basic Aspiration and the direction in which one can move for a fulfilling life with definiteness of program.
2. **Evening Workshops on 'Understanding Science of Relationship through Self Exploration'** – These workshops help the students to open up and explore in depth the values (Feelings) in Human-Human relationship. This becomes the core for them to be resolve within and ensure mutually fulfilling relationship around.
3. **AKTU Organized 8-Day UHV Workshops for Students -** Students attend these 8-day workshops to see the required transformation that we desire in future nation builders. These students become the role model of humane conduct for other students in the campus.
4. **Credit Course in II Yr. on Universal Human Values -** This course provides a complete picture of harmony at various levels of human living (Individual, Family, Society and Nature/Existence)
5. **Elective Courses in III/IV Yr.:** These courses inculcate the value of oneness, open up new vistas of understanding by making the students go through the human values in various philosophies like Madhyasth, Bauddh, Jain, Sankhya, Yog and VedantDarshanas.
6. **Non-Credit Courses, common to all B.Tech. Branches** on (i) Constitution of India Law & Engineering (ii) Essence of Indian Tradition, Culture & Society.
7. **Webinars on Indian Constitution-** Experts are invited for talks/webinars on Constitution of India conducted for Faculty, Staff and Students

Programs for Faculty Members and Staff - Behavior and work of the employees of an institution builds the institutional culture and creates conducive environment for creative expression of its stake holders. Following different levels of workshops are organized for Faculty and Staff for the enhancement of knowledge, humility, integrity, righteous conduct, mutually fulfilling relationship and coordination with higher authorities, colleagues, subordinates and students:

1. **UHV Level-1 Workshop-**orientation to Universal Human Values
2. **UHV Refresher Level-1Workshop-** prerequisite for refreshing the orientation and lays foundation for understanding Level-2 workshop.
3. **UHV Level-2 Workshop-**Helps deeper exploration and understanding of Human being with respect to activities of the Self, human purpose and participation
4. **UHV Level-3 Workshop-** Provides holistic understanding of existential realities and one's role in the existence.
5. **Webinars on Indian constitution**
6. **UHV Workshops for Directors/Deans/Heads/Professors**

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	[View Document](#)
Link for any other relevant information	[View Document](#)

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	[View Document](#)
Code of ethics policy document	[View Document](#)
Any other relevant information	[View Document](#)

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

For unifying faculty, staff and students of the institute, organizing National days including Independence day, Gandhi Jayanthi, Republic Day along with the celebrations of Cultural and Religious festivals such as Janmashtami, Holi, Diwali, Navaratri, etc are in the traditions of ABESEC. The National / International days and regional festivals are celebrated with great joy and enthusiasm. The National Anthem is sung in all the functions. All the festivals are celebrated with great chunk of students and faculty/staff members. Every year, students come together and perform cultural programs like dance and skits, highlighting societal problems. The students also prepare speeches to share their thoughts on these days and render a sense of patriotism. The student clubs at ABESEC organises many cultural programs including Nukkad Natak to address prevailing social issues. The student, faculty/staff and even alumni participate and rejoice during this celebration with great patriotic fervour.

The Institution also commemorates the birth / death anniversaries of great Indian legends like Mahatma Gandhi, Swami Vivekananda, Dr. A.P.J Abdul Kalam, Sir M. Visvesvaraya, Sardar Vallabhbhai Patel. The

students share the teachings of these great personalities through speeches and posters. On Teacher's day too, the students put up a show to express their love and gratitude for their teachers and pay tribute to the great teacher, Dr. Sarvepalli Radhakrishnan.

Women's day is celebrated on International Women's day i.e. 8th March, to show respect towards women for all the efforts done by them in managing the personal and professional life and their contributions as a pay back to society. Other than these, the institute also celebrates the days of national importance such as Constitution Day, Rashtriya Matdata Diwas, Vigilance week to instil the respect towards the national constitution and recall the duties and responsibilities of being the citizen of this great nation.

Hindi Diwas is also celebrated in the institute, as language is the root of our culture and the institute makes all the efforts to preserve it. Several literary events on pertaining social issues are held on this day. Spirituality and Yoga Club, celebrates Yoga Day with great delight and all the members of ABESEC family takes pride in sharing their pics performing Yoga with their families. Workshops and seminars related to spirituality are also organized. Environ club rejoices 'water day', and organizes events related to water conservation on this day.

Apart from these, many events, guest lectures and webinars are regularly organized to instil a sense of national pride and gratitude towards sacrifices of great leaders of our country.

The list of celebrations in the last completed academic year is given below:

Date	Event Name		
15-Aug-19	Independence Day		
24-Aug-19	Janmashtami		
5-Sep-19	Teacher Day		
13-Sep-19	Hindi Diwas		
17-Sep-19	Vishwakarma Day		
18-Sep-19	Jal Diwas		
2-Oct-19	Gandhi Jayanti		
15-Oct-19	Innovation day		
23-Oct-19	Diwali Celebration		
31-Oct-19	National Unity Day		
28-Oct to 2-Nov-2019	Vigilance Awareness week		
26-Nov-19	Constitution Day		
12-Jan-19	Swami Vivekanand Jayanti		
25-Jan-19	Rashtriya Matdata Diwas		
26-Jan-20	Republic Day		
21-Jun-20	International Yoga Day		

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for any other relevant information	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

Best Practice - 1

1. Title of the Practice

Placement readiness of the students through extensive training and development process

2. Objectives of the Practice

- To enhance employability of the students & instil technical and soft skill sets.
- To ensure the holistic development of the students.
- To achieve 100% placement of students.
- To ensure the placements of the students at higher salary packages.

3. The Context

Through years of experience, it is realized that sometimes even scholastically decent students are not able to fetch good jobs in campus placements, due to beyond curricular requisites of the industry. This disparity between curriculum and requisite skill set for employability has been identified through interaction and feedback received, from numerous industry people during placement activities.

In current scenario, It has become imperative to bridge this gap and guide students to develop necessary skill set (soft skills as well as technical skills) for a better likelihoods of placement.

The outcome of the regular interaction with students and faculty mentors was reported that most of the students' needs hand-holding in initial phase of their study to identify the goals and to decide the optimal approach to achieve that from day one of their tenure in the college.

4. The Practice

A dedicated Centre for **Career Planning & Development (CCPD)** is established at ABESEC to develop and work for a strong and long-lasting Industry-Academia relationship, which exists for providing Internships and placement opportunities to students. Few of the faculty members from academic departments are appointed as Departmental Coordinators (DCs) to coordinate between academic departments/students and CCPD.

For the holistic development of the students, a **Student's Employability Enhancement Program (SEEP)** is incorporated in the timetable from 2nd year onwards. The vision of SEEP is to develop industry ready students through training on desired skills essential for job profiles. The SEEP team works upon the following goals:

A. Aptitude and Reasoning module

B. Personal Interview module/Mock Interview Sessions

C. Group Discussion

D. Various soft Skills and Resume Building

Different departments conduct various training in core domain as well as software domain. Different core department trainings are conducted through various innovation centres set up in collaboration with MNCs. Various company specific trainings are also organized for pre-final and final year students to improve the chances of the students to be placed in a specific company.
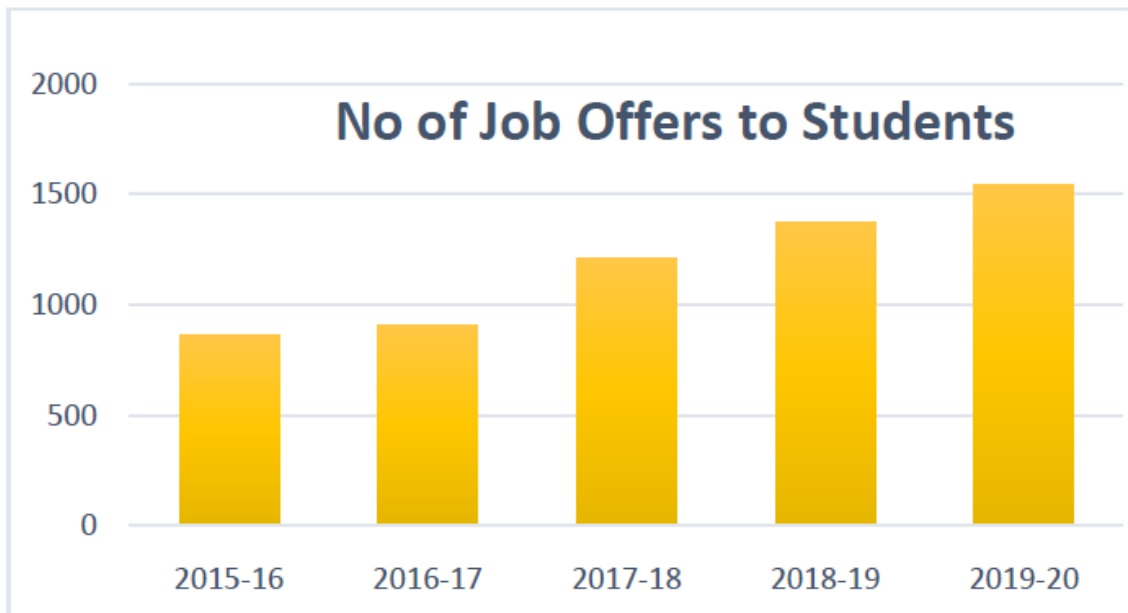
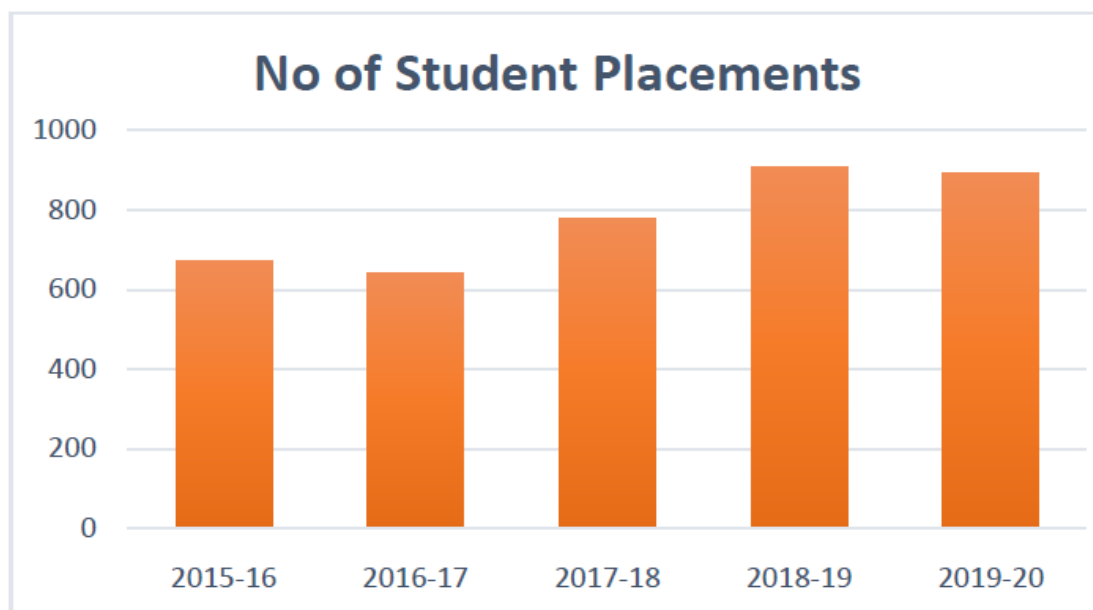The process of the Placement readiness is elucidated below:

* Students with diversified career aspirations and the prospective for employment are identified after the 2nd semester.
* Each student is assigned a faculty mentor, who discusses the career options with his mentees. Based upon the advice of the mentor, Students join various trainings offered by the Institute/ Department.
* Various trainings on specific technologies are provided by a dedicated team under an initiative of Building Skills and Employability (DataRitz Technologies), the objective of which is to train students on technologies beyond the curriculum. These trainings are curated as per latest trends in industry. Departments at their level also organize various trainings to give additional skills and knowledge to the students in addition to the university curriculum, to increase the scope of curricular learning.
* Since students belong to diversified background, not all the students are good in communication/ presentation skills. The soft skills team works upon the students to enhance their soft skills from 3rd semester onwards.
* As the perfect resume is the mirror of the student's capabilities and skills, CCPD team take care of the correction of resume throughout the placement process.
* Students are prepared for the interviews through mock interviews and group discussions, and are also encouraged to improve their academic profile and join courses that will boost their employability
* In addition to the above, special training programs as per the needs of the specific companies visiting the college for bulk hiring are conducted through a dedicated team of *LEARNYS*, the enterprising venture of ABESEC working in the Ed-Tech space. Students are provided access to e-content developed for the trainings and placement preparation and company specific solutions.

Another initiative of ABESEC, called **ORBITS**; works on real-time industrial problems in which the team of faculty members and students works together, enhancing the out of box thinking and solution based approach within the deadline. These initiatives of ABESEC give the real feel of industrial atmosphere to the students within the institute itself.

5. Evidence of Success

- In Session 2019-20, a Total of 322 companies visited ABESEC for the placement purpose.
- Total placements offered in 2019-20, were 1541. Many students were having multiple job offers at the end of session.
- Out of 1092 registered students, 892 students were given unique job offers. The highest Salary Package was Rs. 27.70 LPA by ADOBE.
- ABES students have gained confidence of several top-notch MNCs, which are now regular visitors in our college over the years.
- The graph of overall placements has increased in last five years, the highest package and overall average package has also improved significantly.

No of Job Offers to Students

Year	No of Job Offers
2015-16	~870
2016-17	~910
2017-18	~1210
2018-19	~1380
2019-20	~1540

No of Student Placements

6. Problems Encountered and Resources Required

- Diversified job expectations of students.
- Attitude of Students as well their parents/ guardians towards employment outside the region and non-conventional work culture (e.g. Nightshift, Remote location) had to be changed.
- A separate budget had to be allotted specifically to cater the expenses in training and placement processes.

7. Notes

- Interaction with the Industry experts during Industry visits, Pre-placement talks, and Expert lectures, gave inferences of the industrial requisites about the skill set they look for in the fresh graduates.
- Training received through Industry-Academia Collaborations and various innovation centres set up at ABESEC gave extra edge to the students to perform better in interviews as well as later in their professional life.

Best Practice -2

1. Title of the Practice

Development of E-Content and extensive use of ICT in Teaching and Learning process

2. Objectives of the Practice

To make students effectively involved in the learning process by evolving alternate methods supplementing the traditional lecture methods.

To adopt the paradigm shift from traditional to innovative methods and make teaching an exciting

interactive exercise.

Develop the students' ability to engage in lifelong learning. The usage of ICT tools enabling the students to learn even when they are at home, at their own pace. At the same time, upgradation of faculty competencies with the use of ICT tools for effective teaching and learning.

3. The Context

The use of ICT in the teaching-learning process has proven to be successful in promoting self-learning and helped the students to gain knowledge at their own pace. Feedback from students reflects that only chalk and talk method is not sufficient to sustain the interest of the students in the current era. Further, the curriculum is also going under major reforms, Choice Based Credit System offering Innovative, application oriented; skill-based courses in all disciplines have been introduced. The conventional pedagogy will not be able to cater the requisites of the curriculum in terms of teaching and learning.

The institute truly understands the need of paradigm shift in the teaching learning process, and has encouraged the faculty to be ready, accept and evolve accordingly in the current era of this revolutionary change in the field of education.

4. The Practice

The teachers and administrators of the institute have always looked for the innovations in teaching and learning along the years. In the quest for "any time anywhere" teaching- learning experience, the college has advised the teachers to adopt the use of ICT in their lecture delivery. The same has been encouraged by introducing it in yearly appraisal process. To achieve this, the faculty members have been using power point presentations, online quizzes and simulations in their lectures.

- Faculty members use Google Classroom, MS Teams, Olympus and moodles to share the study material and conduct assessment through tests, assignments and quizzes. Google Meet, MS Teams and Zoom were used to conduct online lectures, whose recordings were shared to students.
- Exams were conducted online, through the above mentioned collaboration tolls and LMS, following a standard procedure. All faculty members used this process effectively and efficiently.
- In an effort to promote self-learning, students were encouraged to prepare the power point presentations as a part of their assignments. This made the teaching learning process a two-way process, involving both the teachers and the students.
- To adopt more sophisticated ICT tools, several workshops/ training programs were conducted to understand the different tools to be used for multimedia material development for teachers.
- The institute has established, Centre of Excellence for Teaching and Learning (CETL) to enhance the quality of teaching and learning process of faculty and students. This initiative was started based upon inferences drawn through feedback,that the conventional passive teaching method of lecturing at length were not benefitting much to students as they couldn't retain the interest for the subjects.
- CETL engages a range of professional development activities that seek to provide teaching staff with the requisite pedagogical skills to improve the learning that takes place in their classrooms. CETL has successfully launched its own youtube channel where lecture videos of the faculty members are available to promote any time any where learning for students. The same may be accesses through https://www.abes.ac.in/cetl-2/
- During the COVID era, in order to compensate the academic loss of the students, ABESEC has

recorded many lectures for the university, which were put on the university portal and were highly praised by top authorities and students.

- AKTU initiative, 'SWAYAM PRABHA', an educational channel was also started in which the contribution of ABESEC is quite remarkable.

5. Evidence of Success

- Video contents (> 600 videos) developed by ABES faculty members were made available to all students of Dr. A.P.J. Abdul Kalam Technical University, Lucknow, online through University portal. In COVID-19 pandemic, thousands of students were benefitted from these videos. In this regard, the involved faculty members were issued letter of appreciation by Hon'ble Vice Chancellor
- The faculty members have developed the video contents of their respective courses, to be disseminated among their students so that the students study at their own place and pace.
- CETL, has a YouTube channel with over 13.3K subscribers and more than 600 videos have been uploaded.
- In several departments, the labs are conducted through online mode where instructions are made through video conferencing. In few departments, experiments are performed by taking help of online Virtual lab, an MHRD initiative.
- In addition to the curriculum, special training programs as per the needs of the specific companies visiting the college for bulk hiring are conducted through a dedicated team of LEARNYS, the enterprising venture of ABESEC working in the Ed-Tech space. Students are provided access to e-content developed for the trainings and placement preparation and company specific solutions.

6. Problems Encountered and Resources Required

- Workshops and seminars had to be organized to bring about attitudinal changes in teachers and to impress on them the effectiveness of methodologies other than the normal classroom chalk and talk teaching.
- Although mostly faculty members are versed with the effective use of modern tools and technologies, some faculty members faced challenges to conduct online classes and in creating multimedia contents.
- Poor internet connectivity in some rural areas emerged as a great challenge in some cases.
- Large number of students and faculty members were not equipped with modern tools and gadgets (good quality laptops/ Desktops/ Mobile phones) and hence it poised a big challenge to conduct online teaching.

7. Notes

- After the establishment of CETL & IQAC at ABES Engineering College, tremendous improvement has been seen in faculty members using ICT tools in their teaching learning process.
- Students have also responded very well to the newly adopted ways of education as they are more confident while giving presentations and having access of contents at anytime and anywhere.

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

SKILL ENHANCEMENT & PROFESSIONAL DEVELOPMENT OF STUDENTS

ABESEC is committed to produce world-class skilled and dedicated technical and managerial human resource, with embedded traditional Indian values and having positive outlook. No stone is left unturned to provide quality education and efforts are made for paid internship, pre-placement offers, technical trainings, industrial consultancy and quality placements.

Industry Connect Program is a unique initiative of the institute that takes learning beyond academic boundaries into the domain of industrial world, in a step-by-step manner. In fact, we wish the students should experience industry in the institutional premises, and the industry connect program is a meticulously designed approach towards this end. The various steps involved in the process are depicted below:

Self-Identification& Mentoring:

In the first year of graduation, all the students take the same curriculum as per the AKTU, the affiliating university guidelines irrespective of the branch and hence students have identify their specific interest in technology areas and continuously keep evolving themself. Their faculty mentors help them in this self-realization, by which students are passionately self-driven towards achieving excellence, not only in academics but also to the engineering world unveiling new dimensions of knowledge on levels of application and research.

In past few years, student teams have participated in various national and international competitions. This pursuit has yielded good results like securing 11 global rank in UAV Challenge – Medical Express and

successive good results in Electric Solar Vehicle Challenge and Effi-Cycle.

Optimised Research Based Industrial Technical Solution (ORBITS):

BITS is an attempt towards creating optimized technical solutions for industry and at the same time answering the question – How do we get engineers industry ready? We get various consultancy/ Industrial projects through BITS on which students are also engaged in collaborative learning. In this capacity the centre has designed and delivered industry grade projects for the likes of Intex Ltd, LGF Sysmac and many more.

Centre of Excellences and Skill Training:

The beginning of globalisation has opened Indian economy to the outside world. The competition among industries has become stiff; therefore, it is urgently needed to prepare engineering students for jobs in multinational companies, by exposing them to newer technologies and engineering methodologies. CoEsare there to create a healthy environment by engaging Industry and Academia resources combined in skill building programs. A gap between training and placement is usually observed in academics and to combat this gap, skill building programs are designed with industries. This approach has ensured better interaction between industry and academia, enhancing relevant skills and innovative thinking amongst the students.

These CoEs have been working on Industry-Institute Interaction and preparing manpower of world class in the field of science and technology by inculcating various skills required by the industry. Though the availability of manpower is abundant in India, well-equipped manpower with employability skills is the real need of the hour. There is need to create avenues for close academia and industry interaction through all the phases of technology development, starting from conceptualizing to commercialization.

Various innovation centres in association with leading industries of repute like National Instruments, SMC corporation, Texas Instruments, Cisco Networking Academy, and various other centres of excellence have been set up for training and skill building purpose.

Centre of Career Planning and Development (CCPD):

- CCPDalways act as a primary driver for students' overall career development through career counselling/guidance and best possible support in terms of placement in renowned companies.
- More than 300 companies visit ABESEC campus every year. Prominent recruiters are: TCS, Microsoft, Capgemini, IBM, Sopra Steria, Yamaha Motors, British Telecom, Edge Telecom, Dhampur Sugar, DCM Shriram, NTT Data, Info-gain, Newgen, Amazon, NIIT Tech., Ashok Leyland, OPPO Mobiles, Gray Orange, etc.
- ABESEC organises pool campus recruitment process towards commitment for our social responsibilities.
- CCPD also organise stipend-based internships and career counselling sessions on regular basis with the help of inhouse trainers as well as with the help of external agencies/professionals.
- Some well-known companies like DXC Technology, Sapient Global Markets, Sapient Razorfish, Adobe, Ashok Leyland, etc. have already recruited our students with maximum stipend up to Rs. 25,000 P.M.
- Students are encouraged to learn at least one foreign languages (French, German or Japanese) through our tie-ups since lots of multinational companies hire graduates who understand their

culture and students from ABESEC gets an edge over other students in the competition.

Continuing Education: At ABES Engineering College, we have an International Outreach Office (IOO) that provides students with multidimensional support for international career planning. The cell actively provides insights, guidance, and counselling to the interested students and connects them to ABESEC alumni abroad.

INurture Incubation Foundation: Since the time belongs to Entrepreneurs, we encourage students to pursue their entrepreneurial inclination through our highly successful ABESEC Entrepreneurship Development Cell (EDC) initiative. In year 2014 the EDC was upgraded into Business Incubator (ABESEC Start-ups Lab) and in year 2019 separate legal entity has formed under section 8 of Companies Act 2013 i.e. INurture Incubation Foundation. It is an initiative to expedite the culture of entrepreneurship amongst the students and faculty members of ABESEC through various programmes and activities.

A dedicated state-of-art space of around 16000 sq. ft. area with incubation facilities like co-working space, high-end internet connection, conference/meeting room, workshop, computer lab etc. The experienced and knowledgeable mentors' pool connected with the incubation centre provides support to students in its entrepreneurial journey.

Our start-ups Spider Bean, Pulsifyer, ClinchHub, Fabricage Dynamics, InternMenia, Fond Events, Edufirm, Happypot Garden Private Limited, The Volt and Nimbleag Private Limited are the few who nurtured by INIF and are doing well in the open environment.

File Description	Document
Link for appropriate web in the Institutional website	[View Document](#)
Link for any other relevant information	[View Document](#)

5. CONCLUSION

Additional Information :

The college is NAAC accredited, ISO 9001:2015 certified and NBA accredited in 04 B.Tech. programmes (Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering, Information Technology) as on date.

The NIRF India ranking of the institute for the year 2020 lies in the Rank Band 201-250.

The institute has achieved MHRD IIC 4.5 Star rating and ARIIA 2020 ranking between 51-75 in category of self financed institute, at the National level.

The institute has been consistently securing top rank position among entire colleges affiliated to AKTU, in B.Tech 1st year pass results since 2015.

Institute has dedicated state-of- the art incubation centre having space of around 16000 sq. ft. area with all incubation facilities.

Institute has a well established industry academia interface which gives a boost in placements, not only in terms of the number of offers but also in average as well as the highest package.

Concluding Remarks :

ABESEC stands as a synonym for quality education in the region. The institute was established in the year 2000 to impart transformative education with embedded values of the Indian culture. The institute has adequate infrastructure to create an inclusive learning atmosphere for all. The Institute provides quality education in B.Tech, M.Tech, MCA and MBA. The assemblage of highly qualified and dedicated faculty members, expert in their respective field, nurture the students to be a versatile professional along with being a responsible citizen. Most of the faculty members are engaged in research and development ctivities, and the annual rate of research publications is highly impressive. The faculty members are also working towards IPR and having numerous patents to their credit. A steadily disciplined but friendly liaison is maintained with students. The teaching-learning process is at its best and along with state of art laboratories the students do fulfill the contemporary industrial requisites irrespective of the curricular gaps. A number of MOUs and the Centre of Excellences, set up with the support of the industry do ensure that student skills match the required skill sets in industries. Students do undertake multi-dimensional real-time projects based on the latest technologies, to gain practical exposure. Special attention is given towards enhancing the employability of the students, including soft skills, communication skills and life skills through a dedicated CCPD team.

The Institute supports overall development of students, endorses a learning environment that delivers employable students with strong analytical mind, thinking ability, entrepreneurial and organizational skills required in a dynamic professional environment. The institute also helps fostering strategic alliance with industry for applied research besides inculcating ethical, social and moral values amongst students to transform them into distinctive professionals. ABESEC has scaled a rapid growth in terms of quality and quantity since its inception, with clear vision, strong governance and support of the stake holders. The thrust in academic excellence and holistic growth of the students remain the prime focus of the institute. The Institute promises to

itself to do every possible thing to quench its thirst to reach the apex of academic excellence.

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