



**Mahavir Education Trust's
Shah & Anchor Kutchhi Engineering College
Chembur, Mumbai 400 088**

**Internal Quality Assurance Cell
IQAC-SAKEC**



**Annual Quality Assurance Report
2019-2020**

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Part – A



Shah & Anchor Kutchhi Engineering College
Mahavir Education Trust Chowk,
W.T Patil Marg, Chembur,
Next to Duke's Company,

Mumbai, Maharashtra 400088

Website: <https://www.shahandanchor.com/home/>

DATA OF THE INSTITUTION

1. Name of the Institution: **Shah & Anchor Kutchhi Engineering College**

- Name of the Head of the institution : **Dr. Bhavesh Patel**
- Designation: **Principal**
- Does the institution function from own campus: **YES**
- Phone no./Alternate phone no.: **022 2558 0854**
- Mobile no.: **+91 9820021466**
- Registered e-mail: **principal@sakec.ac.in**
- Alternate e-mail : **bhavesh.patel@sakec.ac.in**
- Address : **Mahavir Education Trust's
Chowk, Waman Tukaram Patil
Marg, Next to Dukes Co.,
Chembur, Mumbai – 400 088.**
- City/Town : **Mumbai**
- State/UT : **Maharashtra**
- Pin Code : **400 088.**

2. Institutional status:

- Affiliated / Constituent: **Affiliated**
- Type of Institution: **Co-education**
- Location : Rural/Semi-urban/Urban: **Urban**
- Financial Status: **Self Financing.**
- Name of the Affiliating University: **University of Mumbai.**
- Name of the IQAC Co-ordinator : **Dr. Nilakshi Jain**
- Phone no. : **022 2558 0854**
- Alternate phone no.: **022 25568100**
- Mobile: **+91 9967039388**
- IQAC e-mail address: **iqac@sakec.ac.in**
- Alternate Email address: **nilakshi.jain@sakec.ac.in**

3. Website address: <https://www.shahandanchor.com/>
 Web-link of the AQAR: (Previous Academic Year)
<https://www.shahandanchor.com/home/wp-content/uploads/AQAR-final-report-2018-19.pdf>

4. Whether Academic Calendar prepared during the year? **YES**

if yes, whether it is uploaded in the Institutional website: **YES**

Weblink: <https://www.shahandanchor.com/home/academic-calendar/>

5. Accreditation Details:

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	Planning to Apply			
2 nd	NA	NA	NA	NA
3 rd	NA	NA	NA	NA
4 th	NA	NA	NA	NA

5 th	NA	NA	NA	NA
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6. Date of Establishment of IQAC: **03/01/2019**

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
Placement Orientation((Placement Cell)	16/6/2020	390
Workshop on Network Security (Placement Cell)	16/6/2020	409
Mock Interview(Placement Cell)	17/06/2020	430
Session on Software Engineering(Placement Cell)	18/6/2020	426
Resume Writing(Placement Cell)	19/06/2020	396
Mock Interview (Placement Cell)	20/06/2020	385
Quantitative Training: Session 1(Placement Cell)	22/06/2020	378
Session on Cloud Computing(Placement Cell)	23/06/2020	363
Quantitative Training: Session 2(Placement Cell)	23/06/2020	363
Session on Reinforcement Learning (Deep Q)(Placement Cell)	24/06/2020	342
Session on Introduction to compiler(Placement Cell)	25/06/2020	343
Quantitative Aptitude: Tips and Tricks(Placement Cell)	25/06/2020	343
Mock Interview(Placement Cell)	26/06/2020	348
Panel discussion by TCS campus placed Alumni(Placement Cell)	27/06/2020	340
Awareness Session for Gate Examination(Placement Cell)	29/6/2020	333
Expectations of IT industry from Fresher's(Placement Cell)	30/06/2020	342
National level FDP on Moodle learning Management System	25/04/2020 - 30/04/2020	839(All over India)

A Hybrid Webinar Series: Innovative & Emerging Technology in the field of Research (40 Webinars)	13 days started from 06/06/2020	
Internship with Art of Living		30 Students
3 Projects Launched a)Arihant Media Solutions b)Creative Finserve pvt.Ltd c) Skinzy software solutions pvt.Ltd		
Published 4 books, 4 copyrights, 496 papers		SAKEC staff members
IPR Cell Organized Online project competition	13/04/2020	124 Students
IPR Cell Organized Online project poster presentation	15/04/2020	67 Students
IETE Organized Live Webinar on Data Analytics	30/05/2020	134
IETE Organized Series of webinars on The Magic of Photoshop	29/5/2020-30/5/2020	15
ACM Organized Hands-on Workshop on Python & Django Web Frameworks	13/3/2020- 14/3/2020	64 Students
ACM Organized Virtual Triumph	11/4/2020	150 students
ACM Organized Yoga for a healthy living	14/6/2020	48 students and staff
Sambodhi Organized Monthly writing Activities	January to June	20 submissions from both staff and students
Sambodhi Organized All India Essay Writing Event	August and September 2019	10
Sambodhi Organized Felicitation Ceremony for Heartfulness Essay Competition	23/2/2020	02
Speakers Club Organized Technical Debate	31/08/2019	13 Teams
Speakers Club Organized SAKEC QUIZ 2019	09/10/2019	9 Teams
Speakers Club Organized Founder's Day	05/02/2020	23
Speakers Club Organized Elocution	05/10/2019	15

Alumni Cell Organized Guest Lecture on My experience with GRE and how I ended up choosing Germany	31/07/2019	20
Alumni Cell Organized Skill Development Workshop	14/09/2019	
Annual Alumni Meet SAMPARKA2020	01/02/2020	
Alumni Cell Virtual Run-on Global Running Day	03/06/2020	

8. Provide the list of funds by Central/ State Government-

UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Faculty and Students	Minor Research Grant	Mumbai University	2019-20	Rs.3,37,500

9. Whether composition of IQAC as per latest NAAC guidelines: **Yes** (as per Revised Accreditation Framework in November, 2017)

10. No. of IQAC meetings held during the year: **02**

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website: **Yes**

11. Whether IQAC received funding from any of the funding agency to support its activities during the year? : **No**

12. Significant contributions made by IQAC during the current year (maximum five bullets)

- A number of MoUs were signed and students got the opportunity to work on live projects specifically for societal benefits
- SAKEC staff members received 5 minor research grants from Mumbai University because of the consistent efforts of the research cell.
- Established the Institution Innovation Council (IIC) which has been approved by the Ministry of HRD, Govt. of India.
- Teaching learning centre was established.
- Applied for NBA and Committee visited on 12th, 13th and 14th April 2019.

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Purchased Microsoft Team Software	In the covid-19 scenario institute purchased Microsoft Teams and faculty members were trained for conducting online lectures, laboratory, and assessments . Placement cell organized online training modules for students and students were immensely benefited. Many campus recruitments were done online
Establishment of NSS unit	NSS unit is established under the guidance of Dr.Bhavesh Patel, to develop student's personality through community service.
Establishment of T-L center	A dedicated website for SAKEC teaching learning center has been created and hoisted on the college website. Many of the faculty members implemented some innovative strategies in their classroom teaching the objectives of the T-L center is to train faculty members and empower them to adopt innovative teaching and learning practices. The center will also provide support for ICT enabled active learning strategies in classroom teaching. ICT tools can motivate students and they may find interest in the respective subjects.
IPR Cell Establishment	IPR cell providing guidance for filing Intellectual Property of staff and students and conducting various awareness seminars and Skill development Public Training Program on Patenting
Establishment of Sambodhi Cell	Sambodhi Cell is established to encourage the faculty, students and alumni as well can showcase their experience, ideas, thoughts by expressing it in terms of good content.
10 national and 5 international MoU's were signed.	23 projects were initiated and 291 interns for opportunity for internship.
Applied for Grants	Received grants for Rs. 2,80,000.
Students applied for Smart India Hackathon	Received 1st prize of 50000 Rupees at Mumbai Nodal Centre in simple complexity category in Third Edition of World's Biggest Hackathon,36 Hour nonstop coding Competition.
Students applied for Smart India Hackathon	Team code4c@use won the 2nd prize at Smart India Hackathon(SIH) 2020. The team worked on the problem statement provided by Indian Space Research Organisation(ISRO) which was about development of a mobile application that could identify a crop only by its field photo.The Nodal center Gujarat Technological University(GTU),Ahmedabad.
Students applied for Data Mining Cup 2019	In Data Mining Cup 2019 (DMC 2019) SAKEC team was 1st in India and 50th Internationally.The DATA MINING CUP is an international student competition. Since the year 2000

	prudsys, Germany has organized the tournament for student teams.
Students Initiated software	GUNKhata software, which is now part of Maharashtra state board's curriculum of XI standard. GUNKhata is being actively developed at Digital freedom foundation. our students team include Jainam Doshi, Nirali Dodhia and Rudresh Dongre are included in active contributors for software development.
Students Initiated software	SAKEC BLUE Team launch Beta version of Covid Protect application.
An Industrial Visit to ISRO	IETE-SAKEC Student Chapter in collaboration with Electronics and Telecommunication department and IIC 2.0 had organised an Industrial Visit to ISRO Telemetry Tracking and Command Network (ISTRAC), Bangalore, Visvesvaraya Industrial And Technological Museum (Vitm), Bangalore, Centre For Development Of Advanced Computing (C-DAC), Bangalore and Pondicherry, from 2 nd to 9 th January, 2020.
Adoption of National Innovation and Startup Policy (NISP) 2019	Institute has participated in the NISP 2019, formulatd by MHRD's Innovation Cell, campaign.
National Innovation Contest 2020	IIC 2.0 Innovation Contest in collaboration with E-cell SAKEC promotes National Innovation Contest 2020
Art of Living Watershed Project Launch	SAKEC Research launched a brand-new project on 2nd of Feb 2020 at KC College, Churchgate. An amazing launch of the watershed project in the ambience of Rishi Nitya Pragyji a senior faculty from Art of Living
CSI Mumbai TECHNEXT India 2019 awards	The institute has bagged CSI Mumbai TECHNEXT India 2019 awards for Best Research Projects, Best HOD and Best Faculty of the year
National Innovation Contest 2020	Mr. Rohit Gupta, BE Electronics and Telecommunication Engineering (2019-20) and his guide Prof. Shridhar R. Sahu qualified in second round of evaluation in National Innovation Contest 2020 organised by MoE's Innovation Cell and being qualified for next stage of financial assessment. The project submitted by them was "Eye Controlled Wheelchair Using Raspberry Pi"
IETE Innovation Meet(IIM)-2019 project competition	IETE Innovation Meet(IIM)-2019 project competition was conducted at Shah & Anchor Kutchhi Engg. College where more than 60 student/researcher exhibited their work/ideas. The event was judged by the eminent persons from industry and academics, Mr. J R Nikahade and Mr. Karnani.
RHA meet SAKEC award	Shah & Anchor Kutchhi Engineering College has been awarded as Academy of Year 2019 for its Excellent coordination, Best support and Stand for students at Prior

	Technoworld RHA meet & Greet 2019 in the presence of Shirish V. Pandey, APAC lead –RHA and Vighnesh Joshi, an actor. Moreover, Viraj Modi and Rohit Mutalik, SAKEC students and trainees of Red Hat Certified System Administrator (RHCSA) and Red Hat Certified Engineer (RHCE) global certifications course have been awarded as Technostar for their technical intelligence, dedication and effort towards technical world
STTP on Natural Language Processing – Novice to Pro	The conduction of STTP resulted in a great learning experience for the participants. The participants got to learn the latest technologies required for developing web applications. The Keynote speech by Dr. Biplab Bannerjee (Faculty, IITBombay).
Establishment of IIC 2.0: The institute received IIC 2.0 from MHRD’s Innovation Cell. IIC 2.0 conducted several events as per the guidelines laid by MHRD’s Innovation Cell received maximum rating at the end.	By establishing IIC 2.0 the efforts for promotion of innovation and entrepreneurial culture became well organised. IIC 2.0 conducted many workshops and seminars to enhance students entrepreneurial skills.
Organization of one-week AICTE - ISTE Approved and Sponsored STTP, “Advanced Communication Technologies and Security Aspects by Electronics Engineering Department .	The conduction of STTP resulted in a great learning experience for the participants. The participants got to learn the latest technologies required for secured communication.
Organization of one-week AICTE - ISTE Approved and Sponsored STTP, on Recent Trends in IOT by Information Technology Department	The conduction of STTP resulted in a great learning experience for the participants. The participants got to learn the latest technologies required for developing IOT applications. The Keynote speech by Dr. Deven Shah, BOS Chairman, IT Department, Mumbai University
E-Cell organised events like “Working with Geodesics”	The event was organized in order to make students aware about creative use of Mathematics and Geometry
Entrepreneurship Related Events by E-Cell.	E-Cell organized events like Shark Tank 2020 which gave the students an opportunity to pitch their startup ideas in front of investors
Star Certification and Red Hat Certification Courses	Certification courses like RedHat Linux and STAR are facilitated in the college.
Internships: The efforts for extending good internship opportunities to the students were intensified.	The efforts resulted in a significant rise in the number of students going for internships. In the survey done by Internshala, the Institute received the 31st rank in 1800+ Institutions.
CSR activity Posari visit 2019 organized by Computer Engineering Department	1. Understand the issues of society 2. Work for Society

14. Whether the AQAR was placed before statutory body? : No

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning? : No

16. Whether institutional data submitted to AISHE: Yes

Year: **2019-2020**

Date of Submission: **16th January 2020**

17. Does the Institution have Management Information System? : Yes

Module	Implementation
Administration	Implemented successfully from 2002. Periodical up gradations as per the requirement.
Finance and Accounts	Implemented successfully from 2002. Modifications are taken place every now and then as per the accounts department's requirement.
Student Admission and Support	From 2002 onwards. Up gradations as and when required. V.1. From 2002 to 2005 V2. From 2006-2011 V.3. From 2012-2018
Examination	Upgraded Software made in 2002. 2010 (V.1) 2012 (V.2) CBGS R-2012 2016 (V.3) Choice based R-2016.

Part-B

CRITERION I – CURRICULAR ASPECTS

1.1 Curriculum Planning and Implementation

Shah and Anchor Kutchhi Engineering College, Chembur, is affiliated to the University of Mumbai and follows the curriculum as designed by the University of Mumbai. Curriculum comprises of subjects for all four years of the Bachelor of Engineering program.

The academic dean prepares the academic calendar, at the start of semester by discussing with principal and respective departmental HOD's. The subject preferences are collected from faculty at the end of previous semester so that staff can get sufficient time for the preparation of course and accordingly subjects are being allocated. The HOD's of respective departments conduct a course commencement meeting and distribute the overall semester work to faculty. For every subject the course in-charges are made who is responsible for maintaining documents related to the course. The respective course in-charges for the course generates course outcomes (CO) and assign weightage to CO's. Various assessment methods required are also identified and weightages are assigned to them for course outcome attainment.

The timely execution of lectures and lab in accordance with predefined planning is monitored by domain in-charge and HOD on a regular basis. The lecture and lab planning and execution is reflected in faculty diary which is checked by senior faculty. The exam co-ordinators are appointed by the HOD's for smooth conduction of internal assessment which is conducted twice during semester. The internal assessment papers are conducted timely as per university norms. The assessed papers are shown to the students. For the weaker students guidance and remedial classes are conducted.

The institute ensures that academic and industrial gap in the curriculum is identified through inputs of the Departmental Advisory Board (DAB) committee and departmental faculties. For gap's identified faculty conduct activities beyond syllabus ensuring students are up to date with latest advances in the technology.

Project of final year students are decided by doing project review by the project review committee formed by project co-ordinator. After literature review the title of the project is finalized by review committee and project guide is allocated to the group based on specialization of the faculty.

The senior faculty members monitor the lectures and if any suggestions for improvement are done by them to the faculty. Faculties utilizes various innovative teaching learning methods during the lecture such as, 'Think-Pair-Share', 'Flip Classroom' for making the students to think beyond the scope of the subject and apply the techniques to the real-world applications.

Every semester internal audit is conducted by ISO audit committee and its details are shared to all faculty members by HOD, which helps in improvement with the academic process. External ISO audit is done by RINA once in a year.

Mentoring system is also implemented in institute. The department allocates mentor to group of 20 students who guide them for 4 years of their graduation. The mentor conducts meeting and counsels the mentees and parents regularly.

LMC's (Local Management Committee) review the progress of the entire college for the semester and gives the suggestions to improve the academics.

Institute encourages various student bodies associated with IEEE, IETE, ACM, ISTE, CSI, etc. to conduct various events such as workshops, guest lectures and industrial visits which help in the overall growth of students in the field of engineering. Students are also encouraged for national and internal competitions and Smart India Hackathon.

1.1.2 Certificate/ Diploma Courses introduced during the Academic year

Name of the Certificate Course	Name of the Diploma Courses	Date of introduction and duration	focus on employability/ entrepreneurship	Skill development
SPOKEN 1. C language 2. Arduino 3. PHP MYSQL 4.LINUX 5. JAVA Language 6. Python 7. Latex	-	2019-2020	Focus on Employability	Knowledge related to course opted
Redhat Certification	-	1st Batch- 6/8/2019 (1Month) 2nd Batch- 28/12/2019 (1Month) 3rd Batch- 27/02/2020 (1 Month)	Focus on Employability	Knowledge related to Linux-Fundamentals and Advanced Server Configuration
STAR Certification-Star Artificial Intelligence & Machine Learning Business Application (SAMBA)	-	Duration- 24Hrs	Focus on Employability	Knowledge related to AI & ML Business Application
STAR Certification- Star Big Data Analytics (SBDA)	-	Duration- 48Hrs	Focus on Employability	Knowledge related to Big data Analytics
STAR Certification- Star Cyber Security User (SCSU)	-	Duration- 24Hrs	Focus on Employability	Knowledge related to Cyber security
STAR Certification- Star Ethical Hacking Expert (EHE)	-	Duration- 60Hrs	Focus on Employability	Knowledge related to Ethical Hacking
STAR Certification- Star Python	-	Duration- 40Hrs	Focus on Employability	Knowledge related to Python programming

IoT & Interfacing Boards	-	Duration- 72Hrs	Focus on Employability	Hands-on experience of IoT and Board Interfacings
NPTEL	-	July-Oct 2019	Focus on Employability	Knowledge related to course opted
NPTEL	-	Jan-April 2020	Focus on Employability	Knowledge related to course opted

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
Computer Engineering	2019-2020	CSC701-Digital Signal & Image Processing	8 th July 2019
Computer Engineering	2019-2020	CSC702 - Mobile Communication & Computing	8 th July 2019
Computer Engineering	2019-2020	CSC703 - Artificial Intelligence & Soft Computing	8 th July 2019
Computer Engineering	2019-2020	CSDLO7031 - Advance System Security & Digital Forensics	8 th July 2019
Computer Engineering	2019-2020	CSDLO7032 - Big Data & Analytics	8 th July 2019
Computer Engineering	2019-2020	ILO7013 - Management Information System	8 th July 2019
Computer Engineering	2019-2020	ILO7015 - Operation Research	8 th July 2019
Computer Engineering	2019-2020	ILO7016 - Cyber Security and Laws	8 th July 2019
Computer Engineering	2019-2020	CSL701 - Digital Signal & Image Processing Lab	8 th July 2019
Computer Engineering	2019-2020	CSL702 - Mobile App. Development. Tech. Lab	8 th July 2019
Computer Engineering	2019-2020	CSL703 - Artificial Intelligence & Soft Computing Lab	8 th July 2019
Computer Engineering	2019-2020	CSL704 - Computational Lab-I	8 th July 2019
Computer Engineering	2019-2020	CSP705 - Major Project-I	8 th July 2019
Computer Engineering	2019-2020	CSC801 - Human Machine Interaction	8 th July 2019

Computer Engineering	2019-2020	CSC802 - Distributed Computing	8 th July 2019
Computer Engineering	2019-2020	CSDLO8012 - Natural Language Processing	8 th July 2019
Computer Engineering	2019-2020	CSDLO8013 - Adhoc Wireless Network	8 th July 2019
Computer Engineering	2019-2020	ILO8021 - Project Management	8 th July 2019
Computer Engineering	2019-2020	ILO8023 - Entrepreneurship Development and Management	8 th July 2019
Computer Engineering	2019-2020	CSL801 - Human Machine Interaction Lab	8 th July 2019
Computer Engineering	2019-2020	CSL802 - Distributed Computing Lab	8 th July 2019
Computer Engineering	2019-2020	CSL803 - Cloud Computing Lab	8 th July 2019
Computer Engineering	2019-2020	CSL804 - Computational Lab-II	8 th July 2019
Computer Engineering	2019-2020	CSP805 - Major Project-II	8 th July 2019
Information Technology	2019-2020	ITC701 - Enterprise Network Design	8 th July 2019
Information Technology	2019-2020	ITC702 - Infrastructure Security	8 th July 2019
Information Technology	2019-2020	ITC703 - Artificial Intelligence	8 th July 2019
Information Technology	2019-2020	ITDLO7035 - Soft Computing	8 th July 2019
Information Technology	2019-2020	ITDLO7034 - Software Testing and Quality Assurance	8 th July 2019
Information Technology	2019-2020	ITDLO7032 - Mobile Application Development	8 th July 2019
Information Technology	2019-2020	ILO7013 - Management Information System	8 th July 2019
Information Technology	2019-2020	ILO7016 - Cyber Security and Laws	8 th July 2019
Information Technology	2019-2020	ITL701 - Network Design Lab	8 th July 2019
Information Technology	2019-2020	ITL702 - Advanced Security Lab	8 th July 2019
Information Technology	2019-2020	ITL703 - Intelligence System Lab	8 th July 2019
Information Technology	2019-2020	ITL704 - Android Apps Development Lab	8 th July 2019
Information Technology	2019-2020	ITM705 - Project-I	8 th July 2019

Information Technology	2019-2020	ITC801 - Big Data Analytics	8 th July 2019
Information Technology	2019-2020	ITC802 - Internet of Everything	8 th July 2019
Information Technology	2019-2020	ITDLO8041 - User Interaction Design	8 th July 2019
Information Technology	2019-2020	ILO8021 - Project Management	8 th July 2019
Information Technology	2019-2020	ILO8027 - IPR and Patenting	8 th July 2019
Information Technology	2019-2020	ITL801 - Big Data Lab	8 th July 2019
Information Technology	2019-2020	ITL802 - Internet of Everything Lab	8 th July 2019
Information Technology	2019-2020	ITL803 - DevOps Lab	8 th July 2019
Information Technology	2019-2020	ITL804 - R Programming Lab	8 th July 2019
Information Technology	2019-2020	ITM805 - Project-II	8 th July 2019
Electronics Engineering	2019-2020	ELX 701 - Instrumentation System Design	8 th July 2019
Electronics Engineering	2019-2020	ELX702 - Power Electronics	8 th July 2019
Electronics Engineering	2019-2020	ELX703 - Digital Signal Processing	8 th July 2019
Electronics Engineering	2019-2020	ELXDLO7031 - Neural Network & Fuzzy Logic	8 th July 2019
Electronics Engineering	2019-2020	ELXDLO7032 - Advanced network Technologies	8 th July 2019
Electronics Engineering	2019-2020	ELXDLO7034 - Integrated Circuit Technology	8 th July 2019
Electronics Engineering	2019-2020	ELXL701 - Instrumentation System Design	8 th July 2019
Electronics Engineering	2019-2020	ELXL702 - Power Electronics	8 th July 2019
Electronics Engineering	2019-2020	ELXL703 - Digital Signal Processing	8 th July 2019
Electronics Engineering	2019-2020	ELXL704 - Project 1	8 th July 2019
Electronics Engineering	2019-2020	ELXLDLO7031 - Neural Network & Fuzzy Logic	8 th July 2019
Electronics Engineering	2019-2020	ELXLDLO7032 - Advanced network Technologies	8 th July 2019
Electronics Engineering	2019-2020	ELXLDLO7034 - Integrated Circuit Technology	8 th July 2019

Electronics Engineering	2019-2020	ILO7013 - Management Information System	8 th July 2019
Electronics Engineering	2019-2020	ILO7016 - Cyber Security & Laws	8 th July 2019
Electronics Engineering	2019-2020	ELX801 - Internet of Things	8 th July 2019
Electronics Engineering	2019-2020	ELX802 - Analog & Mixed VLSI Design	8 th July 2019
Electronics Engineering	2019-2020	ELXDLO8041 - Advanced Power Electronics	8 th July 2019
Electronics Engineering	2019-2020	ELXDLO8042 - MEMS Technology	8 th July 2019
Electronics Engineering	2019-2020	ELXDLO4044 - Digital Image Processing	8 th July 2019
Electronics Engineering	2019-2020	ILO8027 - IPR & Patenting	8 th July 2019
Electronics Engineering	2019-2020	ILO8029 - Environmental management	8 th July 2019
Electronics Engineering	2019-2020	ELXL801 - Internet of Things	8 th July 2019
Electronics Engineering	2019-2020	ELXL802 - Analog & Mixed VLSI Design	8 th July 2019
Electronics Engineering	2019-2020	ELXL803 - Project-II	8 th July 2019
Electronics Engineering	2019-2020	ELXLDLO8041 - Advanced Power Electronics	8 th July 2019
Electronics Engineering	2019-2020	ELXLDLO8042 - MEMS Technology	8 th July 2019
Electronics Engineering	2019-2020	ELXLDLO8044 - Digital Image Processing	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECC701 - Microwave Engineering	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECC702 - Mobile Communication System	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECC703 - Optical Communication	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECCDLO7031 - Neural Networks and Fuzzy Logic	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECCDLO7033 - Internet Communication Engineering	8 th July 2019

Electronics & Telecommunication Engineering	2019-2020	ILO7016 - Cyber Security and Laws	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ILO7017 - Disaster Management and Mitigation Measures	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL701 - Microwave Engineering Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL702 - Mobile Communication System Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL703 - Optical Communication Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECLDLO7031 - Neural Networks and Fuzzy Logic Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECLDLO7033 - Internet Communication Engineering Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL704 - Project-I	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECC801 - RF Design	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECC802 - Wireless Networks	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECCDLO8043 - Satellite Communication	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECCDLO8044 - Network management in Telecommunication	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ILO8028 - Digital Business Management	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ILO8029 - Environmental Management	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL801 - RF Design Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL802 - Wireless Networks Lab	8 th July 2019

Electronics & Telecommunication Engineering	2019-2020	ECLDLO8043 - Satellite Communication Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECLDLO8044 - Network management in Telecommunication Lab	8 th July 2019
Electronics & Telecommunication Engineering	2019-2020	ECL803 - Project-II	8 th July 2019

1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the Academic year.

Name of Programmes adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
BE (Computer Engineering)	UG	--	July 2019	UG	--
BE (Information Technology)	UG	--	July 2019	UG	--
BE (Electronics Engineering)	UG	--	July 2019	UG	--
BE (Electronic and Telecommunication Engineering)	UG	--	July 2019	UG	--

1.2.3 Students enrolled in Certificate/ Diploma Courses introduced during the year

No of Students	Certificate	Diploma Courses
Registered:1441 Certificate:1171	SPOKEN	--
29	Redhat Certification	--
69	STAR Certification	--
263	IoT & Interfacing Boards	--

1.3 Curriculum Enrichment

1.3.1 Value-added courses imparting transferable and life skills offered during the year

Value added courses	Date of introduction	Number of students enrolled
Internship named "Design-e-mania an exploration into the	24 th June 2019 to 8 th July 2019	56

world of Arduino and Rapsberry Pi"		
Workshop on "PCB Designing and Manufacturing"	13th,14th & 18th September 2019	59
Internship on IoT & Interfacing Boards	20th May to 31st May 2020	303
Guest lecture on PLC (Programmable logic Controller)	27th September 2019	50
One day Workshop on "PCB Designing and Manufacturing"	29/01/2020	60
Series of Webinars on "The Magic of Photoshop"	29/05/2020 - 30/05/202	15
Microcontroller Programming Skill Development workshop- Project Competition	1/2/2020	22
Microcontroller Programming skill Development workshop Winter 2019 Internship	16/12/2019 - 03/01/2020	19
Introduction to RedHat Linux	18/01/2020	41
Five days Hands on Workshop of Microcontroller Programming skill Development	09/12/2019 - 13/12/2019	26
Skill Development Workshop	15/09/2019	31
Drone Development workshop	09/08/2019 - 10/08/2019	32
Introduction to ML with Tensorflow 2.0	10/8/2019	20
World of IoT with NodeMCU Workshop & Competition	30/8/2019 & 31/8/2019	41
Software Conceptual Design	7/10/2019	24
Guest Lecture on Amazon Web services	6/3/2020	71
Getting Started with Bug Bounty	11/3/2020	45
Blockchain	4/9/2019, 13/9/19 & 14/9/2019	61
Pathway,towards Product Development	22/01/2020	95
Hands on AWS and Docker	25/1/2020	37
PCB Designing and Etching	29/1/2020	36
TALK on Ethical Hacking and Cyber security	5/2/2020	54
Digital Forensics	6/2/2020	36
Python and Django web framework	13/3/2020 - 14/3/2020	65
Online Project Competition	17/4/2020	116
online Webinar Data Analytics	30/5/2020	54

1.3.2 Field Projects / Internships under taken during the year

Project/Programme Title	No. of students enrolled for Field Projects / Internships
National Informatics Centre	8
Reliance Corporate Park, Navi Mumbai	2
Bharat Petroleum Corporation Ltd, Mumbai	3
Bhabha Atomic Research Centre, Mumbai	5
Sahu Technologies	7
IIT, Bombay	2
Rashtriya Chemicals & Fertilizer Ltd., Mumbai	4
L & T	5
DEZIGNOLICS	5
Creative Finserve Pvt.Ltd	36
Art of Living (Water Shed Management Project)	15
GCV	3
Exposys Data Labs	3
Blue Eye Corp	16
Happy Bubbles	2
ET Mantra	3
Central & Western Railways	2
Computer Engineering Departmental Internship	20
Electronics Engineering Departmental Internship	106
Information Technology Departmental Internship	11
EXTC Departmental Internship	2
JP Morgan	1
Arihant Media Pvt. Ltd	5
Others	54
Total	320

1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	Yes	Yes	Yes	Yes

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

The institute collects various feedback for the overall improvement in terms of quality education, infrastructure, well equipped laboratory and professional standards to attain the vision and mission of the institute.

The various feedback forms, for students, teachers, alumni and parents are designed by HOD's, Program Co-ordinator and team of senior faculty members.

Students give feedback to faculty regarding the teaching of faculty in classroom considering various parameters such as subject clarity, communication, speed delivery, discipline, etc. The faculty feedback is later analysed by HOD and corrective measures to be taken are informed to the respective faculty member. The faculty receiving excellent feedback are appreciated at departmental level whereas faculty with poor feedback has to provide justification to head of department and corrective measures are discussed to improve the performance and it is also monitored by HOD.

The students also provide course exit, laboratory exit feedback which are designed by course in-charge and subject faculty members. The course and laboratory exit feedback basically comprises of feedback related to overall understanding of the subject by the student. The course and laboratory feedback so collected is analysed and informed to the course in-charge and also the analysed feedback is used for overall course attainment under indirect method of assessment. The co-curricular and extra-curricular feedback are collected from the students who participate in various co-curricular and extra cu-curricular activities throughout the year. The feedback basically covers questionnaire related to what skills student learnt by participating in the event. The feedback is analysed and informed to HOD and Program Co-ordinator. These feedbacks contribute towards course and indirect method attainment.

The facility feedback is collected from final year students regarding infrastructure, Gymkhana, Library, Canteen, and the analysed report is informed to higher authorities for taking necessary action. The final year students also provide program exit feedback.

The teacher feedback is collected from teacher for all facilities available within college premises. The feedback is analysed and facilities which have to be improved are tried to be implemented as per given suggestions.

The parent's feedback is collected during Parent-Teacher meeting which is arranged regularly in every semester for informing the progress of their ward. After meeting the parents provide feedback for various college facilities and teaching methods. The feedback is analysed, and corrective measures are taken by HOD and Higher authorities.

The Alumni feedback is also collected during alumni meet and analysed by Alumni Co-ordinator and accordingly suggestions such as, bridging gap between industries and academic, extra & co-curricular activities, etc. put forward by the alumni are considered for improvement.

The Employee feedback is collected from employers wherein the employers provide the expectation of industry from the students. The employees also help to identify the areas wherein institute can help in overall development of students and make them market ready. The overall collected feedback is analysed by the placement co-ordinator and all necessary actions such as, planning some events for student improvement are conducted.

CRITERION II -TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1. 1 Demand Ratio during the year

Name of the Programme		Number of seats available	Number of applications received	Students Enrolled
Computer Engineering	First Year Engineering	180		181 [#] +8 ^{\$}

	Direct Second Year (Lateral Entry)	12		12
Information Technology	First Year Engineering	120		119 [#] +6 ^{\$}
	Direct Second Year (Lateral Entry)	12		16
Electronics and Telecommunication Engineering	First Year Engineering	60		34 [#] +2 ^{\$}
	Direct Second Year Direct Second Year (Lateral Entry)	06		35 *
Electronics Engineering	First Year Engineering	120		13 [#] + 6 ^{\$}
	Direct Second Year (Lateral Entry)	12		28

*Number of students filled are more as seats are filled against vacancy generated in first year and it is as per DTE norms.

#Admitted under J&K Quota (over and above the sanctioned intake) as per Govt. norms

\$ Admitted under TFWS

2.2 Catering to Student Diversity

2.2.1. Student - Full time teacher ratio (current year data)

Total = (Computer Engineering + Information Technology + Electronics and Telecommunication Engineering + Electronics Engineering +FE)

Year	Number of students enrolled in the institution (UG)		Number of students enrolled in the institution (PG)		Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
	FE	SE	FE	SE			
2019 -20	FE	369 (189+125+36+19)	FE	1 (0+0+1)	130 (21+40+28 +16+24)	00 (00+00+00 +00+00)	7 (00+00+01+0 0+06)
	SE	400 138+134+66+62]					
	TE	513 [156+55(D)+148+7 4+80]	SE	1 (0+1+0)			
	BE	507 [142+61(D)+150+6 7+87]					

2.3 Teaching - Learning Process

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

Total = (Computer Engineering + Information Technology + Electronics and Telecommunication Engineering + Electronics Engineering +FE)

Number of teachers on roll	Number of teachers using ICT (<i>LMS, e-Resources</i>)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
130 (40+29+16+24+21)	130 (40+29+16+24+21)	LCD Projector, Computer, Projector, Smart Board, Microsoft Surface pro, Audio Video enabled classrooms, Digital Library, Urkund Anti Plagiarism tool, Internet Facility, use PPT, Videos, Microsoft Teams	23 (09+07+03+04+00)	10 (06+04+00+00+00)	<p>E-resources:</p> <ul style="list-style-type: none"> i. Digital Library, ii. Spoken Tutorials, iii. E-books iv. Subscription of E-journals, v. NPTEL, vi. Video Repository, vii. Power points, videos , viii. Study material <p>Techniques :</p> <ul style="list-style-type: none"> i. Think-Pair-Share (TPS), ii. Flip Classroom

2.3.2 Students mentoring system available in the institution? Give details. (Maximum 500 words)

Institute has a well- defined policy of mentoring the students enrolled in the institution. The students are from various socioeconomic backgrounds and different regions. The newly admitted students face many emotional, behavioral, and language challenges along with the studies during the first few months of their stay in the institute. They do not have a clear idea about the career opportunity available after

completion of graduation in their mind. Hence, students need mentoring to gain confidence in facing such challenges and continue the career stress free.

Institute-level mentoring

1. On the very first day, the institute organizes orientation program to welcome the newly admitted students and to make them familiar with the new education environment. First, principal of the institute addresses the students by giving them the basic information about the institute, various courses conducted in the institute with their relevance in the industry, the requirements of the national and international community and various career opportunities after completion of graduation, rules and regulation of the institute, exam system, and the evaluation system. Next, the head of the departments also brief them about their respective departments, curriculum, laboratories, major projects, and research facilities available.
2. Institute organizes the student induction program with a duration of two weeks in the first semester.
3. One first year faculty is assigned as mentor to approximately 15-20 newly admitted students to help them to overcome the challenges. Professional counselor is also available in the institute. So, students are suggested to meet the counselor also, if required.

Department-level mentoring

1. In second year, one teaching faculty is assigned to each 15-20 students by the department as a mentor who mentors them for the next three years that is till they become graduate.
2. Mentors maintain the record file of every mentee which is updated bimonthly and maintained till 3 years after his/her graduation. The mentee record file contains students' detailed information like parent's/guardian's name, address, contact numbers, academic details, undertaking form, anti-ragging affidavit.
3. Mentors conduct meeting fortnightly in which mentees can discuss about their problem with the mentor. They are encouraged to participate in curricular, co-curricular, extra-curricular and social activities. Mentor maintains the attendance and minutes of meeting in the record file.
4. Mentees are free to communicate with the mentor through mobile, Whatsapp group, emails. Mentor recognizes mentee as an individual with a personal life and values them as a person, listens to mentee's career concerns and responds appropriately.
5. Parent-mentor meetings are conducted by bringing parents into the mentoring system as key stakeholders to create an environment for open interaction and reflection not only with the mentee but with his/her parents too. Mentors discuss about the progress report of the mentee or any other issue with their parents.
6. Department is providing facility of Language lab(English) in which students are given exclusive training in communication skill.
7. Placement cell conducts the aptitude training and motivational talks regularly. Hands-On workshop, industrial visits are being arranged by the department for the overall development of the students.

Number of students enrolled in the institution		Number of full-time teachers	Mentor: Mentee Ratio
Name of the program	Number of students		
General Science and Humanities	369	21	17.57
Computer Engineering	552	40	13.8
Information Technology	433	29	14.93
Electronics and Telecommunication Engineering	207	16	12.93
Electronics Engineering	230	24	9.58

2.4 Teacher Profile and Quality

2.4.1 Number of full-time teachers appointed during the year

Name of the program	No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.	
FE	Professor	3.6	01	2.6	00	07
	Associate Professor	7.1	07	00	00	
	Assistant Professor	21.3	13	08	00	
Computer Engineering	Professor	4.7	01	3.7	00	04
	Associate Professor	9.6	04	5.6	00	
	Assistant Professor	28.7	35	-	04	
Information Technology	Professor	3.6	00	3.6	00	02
	Associate Professor	7	03	4	00	
	Assistant Professor	20.6	26	-	02	
Electronics and Telecommunication Engineering	Professor	1.6	-	1.6	-	00
	Associate Professor	3.2	-	3.2	00	
	Assistant Professor	9.6	16	-	03	

Electronics Engineering	Professor	3.6	1	2.6	00	02
	Associate Professor	7	6	1	00	
	Assistant Professor	20.6	17	-	01	

2.4.2 Honours and recognitions received by teachers

(received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of award	Name of full-time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019-20	Ms.Swati Nadkarni	HOD, Associate Professor	Awarded with 50 FABULOUS EDUTECH LEADER at the 8th World Education Congress at Taj Land,Mumbai
			Awarded the Best HOD of the year at CSI TechNext India 2019. She was also a member of the Panel Discussion.
	Ms. Dhanshree Toradmalle	Associate Professor	TECHNEXT INDIA 2019, Annual Industry and Academia Conference and Awards (2019)"Best Social Impact Project"
			Project Guide for :Best BE Project for "Donation Management System
	Dr. Nilakshi Jain	Associate Professor	Best Faculty of the year” under subcategory Best Faculty - Evangelizing and Contributing to Spread of knowledge across several institutions at the CSI TechNext India 2019 - Awards to Academia on 28th September 2019
			Awarded as “Best Employee of the Year” by Shah and anchor Kutchhi Engineering college for Academic Year 2018-19
			Best Faculty of the year” under subcategory Best Faculty - Contemporary Subjects/Courses at the CSI TechNext India 2019 - Awards to Academia on 28th September 2019
	Dr Kranti Vithal Ghag	Assistant professor	TECHNEXT INDIA 2019, Annual Industry and Academia Conference and Awards (2019)
			Mentored team Coll_Shahandanchor_1 for ranking 1st Nationally and 50th Internationally at DATA

			MINING CUP 2019, Berlin, Germany (International Student Competition) that had participation from 114 Universities (28 Countries) all over the globe.
	Ms. Archana Chaugule	Assistant professor	" Best Social Impact Project" in CSI TechNext India 28th Sept. 2019
	Ms.Pranali Wagh	Assistant professor	Active SPOC SWAYAM NPTEL Local Chapter Jul-Dec 2019

2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year- end examination
Computer Engineering	1T01821	I	26.12.2015	19.02.2016
	1T00723	III	26.11.2019	17.01.2020
	1T00725	V	27.11.2019	17.01.2020
	1T00717	VII	10.12.2015	12.02.2016
	1T01822	II	08.06.2016	18.07.2016
	1T00724	IV	COVID-19	11.08.2020
	1T00726	VI	COVID-19	11.08.2020
	1T00718	VIII	30.05.2016	04.08.2016
Information Technology	1T03011	I	26.12.2015	19.02.2016
	1T01223	III	26.11.2019	17.01.2020
	1T01225	V	27.11.2019	17.01.2020
	1T01217	VII	17.12.2015	20.02.2016
	1T01822	II	08.06.2016	18.07.2016
	1T01224	IV	COVID-19	11.08.2020
	1T01226	VI	COVID-19	11.08.2020
	1T01218	VIII	30.05.2016	08.08.2016
Electronics and Telecommunication Engineering	1T01821	I	26.12.2015	19.02.2016
	1T01023	III	26.11.2019	23.01.2020
	1T01025	V	27.11.2019	23.01.2020
	1T01017	VII	17.12.2015	25.02.2016
	1T01822	II	08.06.2016	18.07.2016
	1T01024	IV	COVID-19	16.11.2020
	1T01026	VI	COVID-19	16.11.2020
	1T01018	VIII	30.05.2016	10.08.2016

Electronics Engineering	1T01821	I	26.12.2015	19.02.2016
	1T01823	III	26.11.2019	23.01.2020
	1T01825	V	27.11.2019	23.01.2020
	1T01827	VII	17.12.2015	20.02.2016
	1T01822	II	08.06.2016	18.07.2016
	1T01824	IV	COVID-19	16.11.2020
	1T01826	VI	COVID-19	16.11.2020
	1T01828	VIII	30.05.2016	06.08.2016

2.5.2 Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Each student's performance is evaluated through various modes of assessment which is explained below:

➤ **Internal Assessment (IA)**

- **Notification:** IA is scheduled two times in every semester as per the academic calendar and it is notified to students through multiple modes like website, student portal, and notification on notice board.

- **IA syllabus declaration:** IA syllabus is declared two weeks prior to the IA schedule and the important questions are discussed during the lecture for practice.

- **Confidentiality:** Two sets of IA question papers are prepared at the examination centre and submitted to the Exam-in-charge who randomly selects one paper and makes the required number of copies in order to conduct the IA exam.

- **Fairness:** Subject teachers prepare the model solution and marking scheme and assess the answer book accordingly. The assessed answer books are shown to the students as per the academic calendar. Average of two IA marks is considered as the final IA marks.

➤ **Centralised Assessment Process (CAP):** Assessment of answer books of end-semester examination is carried out within seven days from the date of the examination.

➤ **Term work:** Students complete their experiments as per the practical planning and the assessment is being carried out immediately.

➤ **Final year project:** Review of each project is carried out by the experts from the same domain periodically to improve the quality of the project.

➤ **Lecture:** In lecture, students are assessed by conducting periodic quizzes, assignments, TPS/PI activities etc. Lecture monitoring is done in every semester by senior faculties.

2.5.3 Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The Academic calendar of the Institute is designed based on the academic calendar of the Mumbai University. The calendar has time frame for all activities throughout the semester as decided by the institute.

Each activity is carried out through Planning, dissemination, implementation and monitoring which ensure its adherence to Academic Calendar.

1. Planning:

Few important highlights of the academic calendar are as follows:

1. Commencement of the term and term end
2. Submission of lecture Planning/List of Experiments/ Assignments
3. List of mentors and class teachers
4. Meeting of HODs with mentors and Batch Representatives, Parent teacher meeting, mentor-mentee meeting
5. ISO audit.
6. Attendance record of students
7. Internal assessment(IA) tests I & II for FE, SE, TE, BE, ME, declaration of IA results, remedial classes for weak students
8. Student's feedback
9. BE project review
10. Oral/practical examination for
11. Commencement of theory exam
12. Holidays, College Festivals

2. Dissemination:

Dissemination of each activity is carried out by publishing the academic calendar at the beginning of every semester through website.

3. Execution:

1. Lecture and practical planning is carried out for timely completion of the course.
2. Term work Evaluation is carried out weekly through lab performance and journal assessments.
3. Attendance is taken during every lecture / practical in order to display attendance record.
4. Display of course wise IA syllabus, IA timetable, declaration of IA result is carried out as per the academic calendar.

4. Monitoring

Compliance of various activities is monitored by the Departmental Academic Coordinators during department meeting.

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the web link)

Programme Name	Weblink
Computer Engineering	https://www.shahandanchor.com/ce/?page_id=2659
Information Technology	http://www.shahandanchor.com/it/2135-2/
Electronics and Telecommunication Engineering	http://www.shahandanchor.com/extc/?page_id=1995/
Electronics Engineering	http://www.shahandanchor.com/etrx/?page_id=2205

2.6.2 Pass percentage of students

Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final semester/year examination	Pass Percentage
1T00717	Computer Engineering	203	186	91.63%
1T00718		203	203	100%
1T01217	Information Technology	150	141	94%
1T01218		150	150	100%
1T01027	Electronics and Telecommunication Engineering	67	62	92.54%
1T01018		67	67	100%
1T01827	Electronics Engineering	87	60	68.96%
1T01828		87	87	100%

2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as web link)

https://www.shahandanchor.com/home/wp-content/uploads/2.7.1_Student_Satisfaction_Survey.pdf

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 Resource Mobilization for Research

3.1.1 Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the Academic year
Major projects	-	-	-	-
Minor Projects				-
1) Pollution Monitoring and Prediction	One Year	Mumbai University	35,000/-	35,000/-
2) Malaria Cell Image Classification	One Year	Mumbai University	20,000/-	20,000/-
3) Smart Ration Card	One Year	Mumbai University	15,000/-	15,000/-
4) Chatbot for Cyber Law	One Year	Mumbai University	15,000/-	15,000/-
5) E-Crime Manage for trust building	One Year	Mumbai University	15,000/-	15,000/-
6) Traffic Control System using Machine learning and Image Processing	One Year	Mumbai University	35,000/-	35,000/-
7) Sign-language based interface to use digital assistants	One Year	Mumbai University	30,000/-	30,000/-
8) Network Forensic Framework using machine learning Algorithms	One Year	Mumbai University	25,000/-	25,000/-
9) Speaking System for the Paralyzed	One Year	Mumbai University	15,000/-	15,000/-
10) Distracted Driver Detection System using Deep Learning	One Year	Mumbai University	32,500/-	32,500/-
11) IOT based Smart Video Surveillance System	One Year	Mumbai University	25,000/-	25,000/-
12) Iot based Water Quality and Underwater activity monitoring for fish farming	One Year	Mumbai University	25,000/-	25,000/-
13) Website for Physics Solutions	One Year	Mumbai University	25,000/-	25,000/-
14) Synthesis of conducting polymer nanostructures by interface polymerization	One Year	Mumbai University	25,000/-	25,000/-

Interdisciplinary Projects	-	-	-	-
Industry sponsored Projects	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students Research Projects (other than compulsory by the College) Atmospheric Water Generator	1 year	Mahavir Education Trust	Rs. 13,449/-	Rs. 13,449/-
International Projects	-	-	-	-
Any other (Specify)	-	-	-	-
Total	-	-	Rs. 350949/-	Rs. 350949/-

3.2 Innovation Ecosystem

3.2.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of the Workshop/Seminar	Name of the Department	Date(s)
Guest Lecture on PLC 'NOT an IPR'	Electronics Engineering	27/09/2019
PCB Designing and Manufacturing workshop 'NOT an IPR'	Electronics Engineering	13,14 and 18 th September 2019
Workshop on Copyright filing for Electronics Engg. Students 'NOT an IPR'	Electronics Engineering	14th Feb 2020
"Online Project Poster Presentation Competition under Oscillations 2020" 'NOT an IPR'	Electronics & Telecommunication Engineering	15/04/2020
"Microcontroller Programming skill Development workshop Project Competition" 'NOT an IPR'	Electronics & Telecommunication Engineering	01/02/2020

<p>“Microcontroller Programming skill Development workshop: Winter 2019 Internship”</p> <p>‘NOT an IPR’</p>	<p>Electronics & Telecommunication Engineering</p>	<p>16th December, 2019 to 3rd January, 2020</p>
<p>“Introduction to RedHat Linux”</p> <p>‘NOT an IPR’</p>	<p>Electronics & Telecommunication Engineering</p>	<p>18/01/2020</p>
<p>“INDUSTRIAL VISIT to ISRO”</p> <p>‘NOT an IPR’</p>	<p>Electronics & Telecommunication Engineering</p>	<p>2nd to 9th January, 2020</p>
<p>“Hands on Workshop of Microcontroller Programming Skill Development”</p> <p>‘NOT an IPR’</p>	<p>Electronics & Telecommunication Engineering</p>	<p>9th December 2019 to 13th December 2019.</p>
<p>“Skill Development Workshop”</p> <p>‘NOT an IPR’</p>	<p>Electronics & Telecommunication Engineering</p>	<p>15th September 2019.</p>
<p>My experience with GRE and how I ended up choosing Germany</p> <p>‘NOT an IPR’</p>	<p>Electronics & Telecommunication Engineering</p>	<p>31st July, 2019</p>
<p>Exhibition of Mini project</p> <p>‘NOT an IPR’</p>	<p>General Science and Humanities</p>	<p>7th March 2020</p>
<p>Industry Expert Session on Project Management</p> <p>‘NOT an IPR’</p>	<p>Computer Engineering</p>	<p>4/3/2020</p>
<p>Getting Started with Bug Bounty</p> <p>‘NOT an IPR’</p>	<p>Computer Engineering</p>	<p>11/3/2020</p>
<p>Guest Lecture on Amazon Web Services</p>	<p>Computer Engineering</p>	<p>6/3/2020</p>

'NOT an IPR'		
IDP session on Overseas Education 'NOT an IPR'	Computer Engineering	5/2/2020
Intercollegiate Technical Debate 'NOT an IPR'	Computer Engineering	3/2/2020
Workshop on "World of IoT with NodeMCU" 'NOT an IPR'	Computer Engineering	30/8/2019 to 31/8/2019
Workshop on "Introduction to Machine Learning using Tensorflow 2.0" 'NOT an IPR'	Computer Engineering	10/8/2019
Institutional Training Program (ITP) By PCRA 'NOT an IPR'	Information Technology	17th July 2019
Blockchain and its Application 'NOT an IPR'	Information Technology	4th, 13th & 14th September 2019
IPR and Patenting Course Orientation	Information Technology	15th January 2020
Pathways towards Product Development 'NOT an IPR'	Information Technology	22nd January 2020
Hands on AWS and Docker 'NOT an IPR'	Information Technology	25th January 2020
PCB Designing and Etching 'NOT an IPR'	Information Technology	29th January 2020
Digital Forensics 'NOT an IPR'	Information Technology	6th February 2020

Intellectual Property Right Mentoring Session for IT Staff	Information Technology	11th February 2020
Python & Django Web Frameworks 'NOT an IPR'	Information Technology	13th,14th March 2020
Dissemination of institute level elective course IPR & Patenting to students of final year	IPR	18 th October 2019
Intellectual Property Rights Awareness Seminar	IPR	19 th October 2019
One-week Skill development Public Training Program on Patenting	IPR	25 th to 30 th November 2019
Orientation Program of IPR and Patenting (B.E Sem VIII)	IPR	15 th January 2020
Hands-on session on Patent and Copyrights filing	IPR	15 th January 2020
Hands-on session on Patent filing	IPR	22nd January 2020
Intellectual Property Right Mentoring Session for Information Technology Department staff	IPR	11 th February,2020
Intellectual Property Right Mentoring Session for Computer Engineering Department staff	IPR	12 th February, 2020
Intellectual Property Right Mentoring Session for Electronics and Telecommunication Engineering Department staff	IPR	12 th February, 2020

Intellectual Property Right Mentoring Session for Electronics Engineering Department staff	IPR	14 th February, 2020
Workshop on Design Thinking	IIC 2.0	23-10-2019 & 25/10/2019
Seminar on Innovation	IIC 2.0	16-10-2019
Enhancing Academic Patenting with IEEE IQP	IIC 2.0	23-10-2019
Workshop on National Policy on Innovation And Startup	IIC 2.0	19-12-2019
Workshop On “Software Conceptual Design”	IIC 2.0	10-07-2019
Hands-On Workshop On Microcontroller Programming Skill Development	IIC 2.0	9/12/2019 – 13/12/2019
Universal Human Values	IIC 2.0	9/10/19 & 11/10/19
Mathematics Tips & Tricks	IIC 2.0	30/10/2019
Hands-On Workshop on AWS & Docker	IIC 2.0	25/01/ 2020
Hands-On Workshop on Redhat Linux	IIC 2.0	18/01/2020
Pathway Towards Product Development	IIC 2.0	22/01/2020

Workshop on Digital Forensic	IIC 2.0	6/02/2020
How to Plan Startup-Legal and Ethical Steps	IIC 2.0	14/01/2020
Hangout with Successful Startup	IIC 2.0	04/01/2020
Mentoring Session On IPR	IIC 2.0	22/01/2020
Workshop on PCB Design	IIC 2.0	29/01/2020
A Talk on Ethical Hacking and Cyber Security	IIC 2.0	05/02/2020
Leadership Talk	IIC 2.0	09/04/2020
Leadership Talk	IIC 2.0	07/04/2020
Leadership Talk	IIC 2.0	10/04/2020
Leadership Talk	IIC 2.0	11/04/2020

Leadership Talk	IIC 2.0	15/04/2020
TPP and Business Development	IIC 2.0	14/01/20 to 15/01/20
Leadership Talk	IIC 2.0	23/05/2020
Leadership Talk	IIC 2.0	16/05/2020
Leadership Talk	IIC 2.0	9/5/2020
Leadership Talk	IIC 2.0	2/5/2020
Leadership Talk	IIC 2.0	27/04/2020
Leadership Talk	IIC 2.0	23/04/2020
Leadership Talk	IIC 2.0	22/04/2020
Leadership Talk	IIC 2.0	21/04/2020
Leadership Talk	IIC 2.0	20/04/2020
Leadership Talk	IIC 2.0	16/04/2020

Webinar on “Data Analytics”	IIC 2.0	30/05/2020
Online Project Poster Presentation Competition	IIC 2.0	15/04/2020
National Innovation and Startup Policy for Students and Faculty 2019 - A Guiding Framework for HEIs for Implementation	IIC 2.0	28-04-2020
Role and Importance of Pre-Incubators, Incubators and Accelerators in HEIs - Harnessing Innovation and Entrepreneurial Potential of Students and Faculties at Early Stage	IIC 2.0	29/04/2020
Hangout with Emerging Innovator & Entrepreneurs Supported through MIC & AICTE	IIC 2.0	30/04/2020
Role of Network Enablers in driving I&E in HEIs - A Case of TiE, India	IIC 2.0	1/05/2020
Hangout with Successful Startup Founder & Learn on Design thinking approach for Hardware Innovation	IIC 2.0	04/05/2020
Entrepreneurship, Business Idea and Business Model Canavas	IIC 2.0	05/05/2020
How to Identify Right Problem and Solution using the Double Diamond Approach in Design	IIC 2.0	06/05/2020
Intellectual Property (IP) Management at Early Stage of Innovation and Start-ups	IIC 2.0	07/05/2020
Understanding Angel and Venture Capital Funding - What is there for Early Stage innovator & Entrepreneurs	IIC 2.0	08/05/2020
Legal and Ethical Steps - Productive Entrepreneurship and Startup	IIC 2.0	12/05/2020
Innovating Self- Screen and Identify right opportunities	IIC 2.0	13/05/2020

Understanding Role and Application of Marketing Research at Idea to Start up Stage - Foundation Level	IIC 2.0	14/05/2020
Innovation Risk Diagnostic — Product Innovation Rubric(PIR)	IIC 2.0	15/05/2020
Idea, Entrepreneurship Opportunities, Business Model and Business Plan	IIC 2.0	19/05/2020
Use of Market Data and Application of Marketing Research Tools and Methodology - Increasing Chances of Survivality of Innovation and Venture - Advance Level	IIC 2.0	20/05/2020
Frugal Innovations and Social Entrepreneurship	IIC 2.0	21/05/2020
Interaction with Student Innovators and Entrepreneurs Emerged from Smart India Hackathon (SIH)	IIC 2.0	22/05/2020

3.2.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
BEST HOD AWARD	Dr. Subha Subramaniam	CSI TECHNEXT INDIA 2019	28/09/2019	Academic leadership
BEST Research Project AWARD	Asha Durafe	CSI TECHNEXT INDIA 2019	28/09/2019	Research Project
Indian Women Achievers Award 2020	Preethi Warriar	Asian Literary Society	-	Literary Award
BEST Faculty AWARD	Rohan Borgalli	CSI TECHNEXT INDIA 2019	28/09/2019	Funded Research
Priar Technoworld RHA meet & Greet 2019	Awarded as Academy of Year 2019 for its Excellent coordination, Best support and stand	Priar Technoworld	2019	Technology

	for students.			
Best HOD of the Year 2019	Ms. Swati Nadkarni	CSI TechNext India	28th September 2019	Education – Creating a Digital Ecosystem
Best Faculty of the year under subcategories Best Faculty – Evangelizing	Dr.Nilakshi Jain	CSI TechNext India	28th September 2019	Education – Creating a Digital Ecosystem
Contributing to the spread of knowledge across several institutions and Contemporary Subjects/Courses	Dr.Nilakshi Jain	CSI TechNext India	28th September 2019	Education – Creating a Digital Ecosystem
Best Faculty of the year under subcategory Best Faculty – Contemporary Subjects/Courses	Dr.Kranti Ghag	CSI TechNext India	28th September 2019	Education – Creating a Digital Ecosystem
Best Social Impact Project	Ms. Dhanashree Toradmalle	CSI TechNext India	28th September 2019	Education – Creating a Digital Ecosystem
Best Social Impact Project	Ms.Archana Chaugule	CSI TechNext India	28th September 2019	Education – Creating a Digital Ecosystem

3.2.3 No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored by
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Name of the Start-up	Nature of Start-up	Date of commencement
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3.3 Research Publications and Awards

3.3.1 Incentive to the teachers who receive recognition/awards

State	National	International
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3.3.2 Ph. Ds awarded during the year (*applicable for PG College, Research Center*)

Name of the Department	No. of Ph.Ds. Awarded
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3.3.3 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publications	Average Impact Factor (if any)
International	Electronics	10	5.5145
	Electronics and Telecommunication	03	----
	Computer Engineering	14	4.2
	Information Technology	28	6.70
	General Science and Humanities	00	----

3.3.4 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Name of Department	No. of Publications
Electronics	03
Electronics and Telecommunication	05
Computer Engineering	04
Information Technology	18

General Science and Humanities	NIL
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3.3.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index

Title of the Paper	Name of the Author	Title of the Journal	Year of Publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Energy Generation and saving using Non Conventional Energy Source	Dr Subha Subramaniam	IRJET Volume 7 Issue o5 May 2020 e-ISSN : 2395-0056	2020	-	SAKEC	-
Automatic and multi-dimensional pipe cleaning bot for covid-19 situation	Dr Subha Subramaniam	Journal of Global Resources Biannual International Peer - Reviewed Journal	2020	-	SAKEC	-
Securing Criminal Records using R-Pi, QR code and Steganography	Prof Asha Durafe	IJITEE, ISSN: 2278-3075, Volume-9 Issue-6, April 2020	2020	-	SAKEC	-
Steganography for Public Security	Prof Asha Durafe	IJCRT, ISSN:2330-2882, Vol:8, issue 4, April 2020.	2020	-	SAKEC	-
Development and analysis of IWT-SVD and DWT-SVD steganography	Prof Asha Durafe	Journal of King Saud University, Computer and Information Sciences, Elsevier	2020	-	SAKEC	-
Digital Image Forgery Detection	Prof Salabha Joy Jacob	International Research Journal of Engineering and Technology Volume 7 Issue 5 May 2020 e-ISSN 2395-0056 p-ISSN 2395-0072	2020	-	SAKEC	-

Image Processing Based Driving Assistant System	Prof Nibha Desai	Iconic Research and Engineering Journals Volume 3 Issue 11 May 2020 ISSN : 2456-8880	2020	-	SAKEC	-
Adders : The Basic Arithmetic Building Block	Prof Nibha Desai	International Journal of Engineering Research & Technology, Volume 9, Issue 8	2020	-	SAKEC	-
Energy Generation and saving using Non-Conventional Energy Source	Prof Santosh Kamble	IRJET Volume 7 Issue o5 May 2020 e-ISSN : 2395-0056	2020	-	SAKEC	-
An Effective Content Based Image Retrieval (CBIR) System based on Model Approach.”	Mr. Rohan Borgalli	International Journal for Scientific Research and Development	Vol. 7, Issue 11, Jan, 2020 ISSN (online): 2321-0613	-	SAKEC	-
Smart Pothole Detection And Mapping System	Mr. Rohan Borgalli	Journal of Ubiquitous Computing and Communication Technologies (UCCT)	2020	-	SAKEC	-
Virtual fashion hub	Mr. Panjab Mane	International Research Journal of Engineering and Technology (IRJET)	2020	-	SAKEC	-

Carrer guide application using ML	Mr. Panjab Mane	International Research Journal of Engineering and Technology (IRJET)	2020	-	SAKEC	-
Automatic Text Summarization and Categorization : Fuzzy Approach	Mr. Panjab Mane	International Research Journal of Engineering and Technology (IRJET)	2020	-	SAKEC	-
Societal Adoptions to Ocean and Climate Extremes : Application of Information and Communication Technologies for Governing and Sustaining Marine Food Chain in Indo-Pacific and Beyond.	Dr. Kalpana Chaudhari	Ocean Science meeting 2020, San Diego CA,USA	16th Feb-21st Feb 2020	-	SAKEC	-
Challenges and Opportunities in Preparedness for Climate and Ocean Extreme through Societal Participation: Contextualizing Data Science for Ocean and Marine Sustainability.	Dr. Kalpana Chaudhari	Ocean Science meeting 2020, San Diego CA,USA	16th Feb-21st Feb 2020	-	SAKEC	-
Eye Controlled Wheelchair Using Raspberry Pi	Mr. Rohit Gupta, Mr. Rajesh Kori, Ms. Swapnali Hambir, Mr. Ajit Upadhyay, Mr.	3rd International Conference on Advances in Science & Technology (ICAST) 2020, KJSIEIT, Mumbai	2020 ISSN: 1556-5068	-	SAKEC	-

	Shridhar R. Sahu					
Teaching Assessment Tool: Using AI and Secure Techniques	Dr. Nilakshi Jain	IJEME	Jun-20	-	SAKEC	-
Comparative Study of Privacy Preserving-Contact Tracing on Digital Platforms	Dr. Nilakshi Jain	2020 International Conference on Computational Intelligence (ICCI)	2020	-	SAKEC	-
X-ray Machines integration with AI	Dr. Nilakshi Jain	2020 IEEE 20th International Symposium on Computational Intelligence and Informatics (CINTI)	2020	-	SAKEC	-
Digital Forensic Capability Analyzer – DigiShield	Dr. Nilakshi Jain	International Journal of Scientific Research in Engineering and Management	2020	-	SAKEC	-
Publications Indexer Tool: Using Web Crawler and Javascript	Dr. Nilakshi Jain	International Research Journal of Engineering and Technology (IRJET)	2020	-	SAKEC	-
NGO Support Software Solution: for effective reachability	Dhanashree Toradmalle	I. J. Education and Management Engineering	2020	-	SAKEC	-

Design and Implementation of Music Album Management System	Dhanashree Toradmalle	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2020	-	SAKEC	-
Image Gallery	Dhanashree Toradmalle	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2020	-	SAKEC	-
Lightweight Certificate less Signcryption Scheme Based on Elliptic Curve	Dhanashree Toradmalle (Scopus)	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2020	-	SAKEC	-
Image Gallery	Dhwaniket Kamble	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2020	-	SAKEC	-
Clinical Text Mining of Electronic Health Records to Classify Leprosy Patients Cases	Jalpa Mehta	(IJITEE)	Mar-20	1	SAKEC	-
AI Power Hand Gesture Control Vehicle	Dr. Kranti Vithal Ghag	(IJERT)	July-2020	-	SAKEC	-

Sentiment Analysis of Customers Opinions on Hotel Stays using Voted Classifier	Manya Gidwani	(IJERT)	May-20	-	SAKEC	-
Object detection and motion tracking	Ashwini Deshmukh	Recent trends in IT and its application	Jan-20	-	SAKEC	-
Real Time Emotion Recognition System	Ashwini Deshmukh	IRJET	Apr-20	-	SAKEC	-
Object detection and motion tracking	Jahanvi Gupta	RTIA	Jan-20	-	SAKEC	-
Weather Surveillance System	Mr.Harish Motekar	IJESC	Apr-20	-	SAKEC	-
Self Driving Car Using Machine Learning	Mr.Harish Motekar	International Research Journal of Engineering and Technology (IRJET)	2020	-	SAKEC	-
Hand Gestures Recognition using Deep Learning	Ms. Bhargavi Dalal	(IRJET)	Mar-20	-	SAKEC	-
Online Product Scoring based on Sentiment Based Review Analysis	Ms. Bhargavi Dalal	(IRJET)	Mar-20	-	SAKEC	-
Optimization Of Social Media Comments To Improve Customer Journey Using Machine Learning	Ms. Swati Nadkarni	2020 IEEE Bombay Section Signature Conference (IBSSC)	2020	-	SAKEC	-
Online Product Grading using Sentimental Analysis with SVM	Ms. Swati Nadkarni	2020 4th International Conference on Intelligent Computing and Control Systems (ICICCS)	2020	-	SAKEC	-

Implementati on of Virtual Assistant with Sign Language using Deep Learning and TensorFlow	Ms. Swati Nadkarni	2020 Second International Conference on Inventive Research in Computing Applications (ICIRCA)	2020	-	SAKEC	-
A Review on Multiparametric Magnetic Resonance Imaging for the Detection of Breast Cancer	Ms. Swati Nadkarni	2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)	2020	-	SAKEC	-
Structural Segmentation of Alap in Dhrupad Vocal Concerts	Ms. T.P. Vinutha	Transactions of International Society for Music Information Retrieval (TISMIR)	2020	----	----	SAKEC
Pocket Placement	Priyanka Ghule	Seybold Report	2020	---	---	SAKEC
Fake news detection using DL approach	Deepti Nikumbh	Journal of Interdisciplinary Cycle Research	2020	----	---	SAKEC
Depression and haressment detection on social media using machine learning approach	Deepti Nikumbh	Journal of Interdisciplinary Cycle Research	2020	----	----	SAKEC
Industrial IoT stack development: Professionalism required and constraints"	Prof Shubhangi Motewar	International Journal for Emerging Trends in Engineering and Management Research	2020	----	----	SAKEC
Travel Made Easy:An Android Application	Radhika Fulzele	Seybold Report	2020	----	----	SAKEC

Social Economic Challenges Faced in the Agricultural Industry and How to Eradicate Them	Rekha More	Journal of University of Shanghai for Science and Technology	2020	11	---	SAKEC
Automated Carrom bot	Monika Kanojiya	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Smart Fleet Monitoring system	Krupa Chotai	International Research journal of Engineering and Technology(IRJET)	2020	28	---	SAKEC
Identification of Lung Cancer using Image Processing and Convolutional Neural Networks	Jaya Zalte	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Real-Time Garbage, Potholes and Manholes Monitoring System using Deep Learning Techniques	Shahzia Sayyad	IEEE 2020 4th International Conference on Trends in Electronics and Informatics (ICOEI)(48184)	2020	----	---	SAKEC
Game Based Pedagogy System for Assessment using features like OCR and Speech- To-Text Recognition	Shahzia Sayyad	International Journal of Emerging Science and Engineering (IJESE)	2020	---	---	SAKEC
Doctor's Emate	Swati Gajbhiye	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC

Survey on IoT based Bridge Health Monitoring Systems	Vaishali Hirlekar	International Journal of Research in Engineering, Science and Management	2020	---	---	SAKEC
Achieving Authentication of Remotely Stored Data	Vidyullata Devmane	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2020	---	---	SAKEC
Travel Made Easy: An Android Application	Vidyullata Devmane	Journal of Seybold Report	2020	---	---	SAKEC

3.3.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of the Author	Title of the Journal	Year of Publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
Energy Generation and saving using Non Conventional Energy Source	Dr Subha Subramaniam	IRJET Volume 7 Issue o5 May 2020 e-ISSN : 2395-0056	2020	29	-	SAKEC
Automatic and multi-dimensional pipe cleaning bot for covid-19 situation	Dr Subha Subramaniam	Journal of Global Resources Biannual International Peer - Reviewed Journal	2020	---	---	SAKEC
Securing Criminal Records using R-Pi, QR code and Steganography	Prof Asha Durafe	IJITEE, ISSN: 2278-3075, Volume-9 Issue-6, April 2020	2020	---	---	SAKEC

Steganography for Public Security	Prof Asha Durafe	IJCRT, ISSN:2330-2882, Vol:8, issue 4, April 2020.	2020	---	---	SAKEC
Development and analysis of IWT-SVD and DWT-SVD steganography	Prof Asha Durafe	Journal of King Saud University, Computer and Information Sciences, Elsevie	2020	---	---	SAKEC
Digital Image Forgery Detection	Prof Salabha Joy Jacob	International Research Journal of Engineering and Technology Volume 7 Issue 5 May 2020 e-ISSN 2395-0056 p-ISSN 2395-0072	2020	28	---	SAKEC
Image Processing Based Driving Assistant System	Prof Nibha Desai	Iconic Research and Engineering Journals Volume 3 Issue 11 May 2020 ISSN : 2456-8880	2020	---	---	SAKEC
Adders : The Basic Arithmetic Building Block	Prof Nibha Desai	International Journal of Engineering Research & Technology, Volume 9, Issue 8	2020	---	---	SAKEC
Energy Generation and saving using Non Conventional Energy Source	Prof Santosh Kamble	IRJET Volume 7 Issue o5 May 2020 e-ISSN : 2395-0056	2020	28	---	SAKEC
“An Effective Content Based Image Retrieval	Mr. Rohan Borgalli	International Journal for Scientific Research and Development Vol. 7, Issue 11,	2020	----	---	SAKEC

(CBIR) System based on Model Approach.”		Jan, 2020 ISSN (online): 2321-0613				
Smart Pothole Detection And Mapping System	Mr. Rohan Borgalli	Journal of Ubiquitous Computing and Communication Technologies (UCCT)	2020	----	---	SAKEC
Virtual fashion hub	Mr. Panjab Mane	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Carrer guide application using ML	Mr. Panjab Mane	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Automatic Text Summarization and Categorization : Fuzzy Approach	Mr. Panjab Mane	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Societal Adoptions to Ocean and Climate Extremes : Application of Information and Communication Technologies for Governing and Sustaining Marine Food Chain in Indo-Pacific and Beyond.	Dr. Kalpana Chaudhari	Ocean Science meeting 2020, San Diego CA,USA	16th Feb-21st Feb 2020	---	---	SAKEC
Challenges and Opportunities in	Dr. Kalpana Chaudhari	Ocean Science meeting 2020, San Diego CA,USA	16th Feb-21st Feb	---	---	SAKEC

Preparedness for Climate and Ocean Extreme through Societal Participation: Contextualizing Data Science for Ocean and Marine Sustainability.			2020			
Eye Controlled Wheelchair Using Raspberry Pi	Mr. Rohit Gupta, Mr. Rajesh Kori, Ms. Swapnali Hambir, Mr. Ajit Upadhyay, Mr. Shridhar R. Sahu	3rd International Conference on Advances in Science & Technology (ICAST) 2020, KJSIEIT, Mumbai	2020 ISSN: 1556-5068	---	---	SAKEC
Teaching Assessment Tool: Using AI and Secure Techniques	Dr. Nilakshi Jain	IJEME	Jun-20	---	---	SAKEC
Comparative Study of Privacy Preserving-Contact Tracing on Digital Platforms	Dr. Nilakshi Jain	2020 International Conference on Computational Intelligence (ICCI)	2020	---	1	SAKEC
X-ray Machines integration with AI	Dr. Nilakshi Jain	2020 IEEE 20th International Symposium on Computational Intelligence and Informatics (CINTI)	2020	---	1	SAKEC
Digital Forensic Capability Analyzer – DigiShield	Dr. Nilakshi Jain	International Journal of Scientific Research in Engineering and Management	2020	---	4	SAKEC
Publications Indexer Tool: Using Web Crawler and	Dr. Nilakshi Jain	International Research Journal of Engineering and Technology	2020	28	4	SAKEC

Javascript		(IRJET)				
NGO Support Software Solution: for effective reachability	Dhanashree Toradmalle	I. J. Education and Management Engineering	2020	----	---	SAKEC
Design and Implementation of Music Album Management System	Dhanashree Toradmalle	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2020	---	---	SAKEC
Image Gallery	Dhanashree Toradmalle	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2020	----	---	SAKEC
Lightweight Certificate less Signcryption Scheme Based on Elliptic Curve	Dhanashree Toradmalle (Scopus)	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2020	----	---	SAKEC
Image Gallery	Dhwaniket Kamble	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	2020	---	---	SAKEC
Clinical Text Mining of Electronic Health Records to Classify	Jalpa Mehta	(IJITEE)	Mar-2020	----	1	SAKEC

Leprosy Patients Cases						
AI Power Hand Gesture Control Vehicle	Dr. Kranti Vithal Ghag	(IJERT)	July-2020	---	----	SAKEC
Sentiment Analysis of Customers Opinions on Hotel Stays using Voted Classifier	Manya Gidwani	(IJERT)	May-2020	----	----	SAKEC
Object detection and motion tracking	Ashwini Deshmukh	recent trends in IT and its Application	Jan-2020	---	---	SAKEC
Real Time Emotion Recognition System	Ashwini Deshmukh	(IRJET)	Apr-2020	28	----	SAKEC
object detection and motion tracking	Ms. Jahanvi Gupta	RTIA	Jan-20	----	----	SAKEC
Weather Surveillance System	Mr. Harish Motekar	IJESC	Apr-20	----	----	SAKEC
Self Driving Car Using Machine Learning	Mr. Harish Motekar	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Hand Gestures Recognition using Deep Learning	Ms. Bhargavi Dalal	(IRJET)	Mar-20	28	---	SAKEC
Online Product Scoring based on Sentiment Based Review Analysis	Ms. Bhargavi Dalal	(IRJET)	Mar-20	28	---	SAKEC
Optimization Of Social Media Comments To	Ms. Swati Nadkarni	2020 IEEE Bombay Section Signature	2020	—	----	SAKEC

Improve Customer Journey Using Machine Learning		Conference (IBSSC)				
Online Product Grading using Sentimental Analysis with SVM	Ms. Swati Nadkarni	2020 4th International Conference on Intelligent Computing and Control Systems (ICICCS)	2020	---	---	SAKEC
Implementation of Virtual Assistant with Sign Language using Deep Learning and TensorFlow	Ms. Swati Nadkarni	2020 Second International Conference on Inventive Research in Computing Applications (ICIRCA)	2020	---	---	SAKEC
A Review on Multiparametric Magnetic Resonance Imaging for the Detection of Breast Cancer	Ms. Swati Nadkarni	2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)	2020	---	---	SAKEC
Structural Segmentation of Alap in Dhrupad Vocal Concerts	Ms. T.P. Vinutha	Transactions of International Society for Music Information Retrieval (TISMIR)	2020	---	---	SAKEC
Pocket Placement	Priyanka Ghule	Seybold Report	2020	---	---	SAKEC
Fake news detection using DL approach	Deepti Nikumbh	Journal of Interdisciplinary Cycle Research	2020	---	---	SAKEC

Depression and harassment detection on social media using machine learning approach	Deepti Nikumbh	Journal of Interdisciplinary Cycle Research	2020	----	----	SAKEC
Industrial IoT stack development: Professionalism required and constraints"	Prof Shubhangi Motewar	International Journal for Emerging Trends in Engineering and Management Research	2020	---	----	SAKEC
Travel Made Easy: An Android Application	Radhika Fulzele	Seybold Report	2020	—	----	SAKEC
Social Economic Challenges Faced in the Agricultural Industry and How to Eradicate Them	Rekha More	Journal of University of Shanghai for Science and Technology	2020	11	---	SAKEC
Automated Carrom bot	Monika Kanojiya	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Smart Fleet Monitoring system	Krupa Chotai	International Research journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Identification of Lung Cancer using Image Processing and Convolutional Neural	Jaya Zalte	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC

Networks						
Real-Time Garbage, Potholes and Manholes Monitoring System using Deep Learning Techniques	Shahzia Sayyad	IEEE 2020 4th International Conference on Trends in Electronics and Informatics (ICOEI)(48184)	2020	---	---	SAKEC
Game Based Pedagogy System for Assessment using features like OCR and Speech- To-Text Recognition	Shahzia Sayyad	International Journal of Emerging Science and Engineering (IJESE)	2020	---	---	SAKEC
Doctor's E-mate	Swati Gajbhiye	International Research Journal of Engineering and Technology (IRJET)	2020	28	---	SAKEC
Survey on IoT based Bridge Health Monitoring Systems	Vaishali Hirlekar	International Journal of Research in Engineering, Science and Management	2020	---	---	SAKEC
Achieving Authentication of Remotely Stored Data	Vidyullata Devmane	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2020	---	---	SAKEC
Travel Made Easy: An Android Application	Vidyullata Devmane	Journal of Seybold Report	2020	---	---	SAKEC

3.3.7 Faculty participation in Seminars/Conferences and Symposia during the year :

No. of Faculty	International level	National level	State level	Local level
Attended Symposia	5	1	0	0
Attended Seminars/ Workshops	98	173	76	82
Presented papers	14	4	0	0
Resource Persons	8	12	1	9

3.4 Extension Activities

3.4.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers co-ordinated such activities	Number of students participated in such activities
INDUSTRIAL VISIT to ISRO” January 2020	EXTC Department SAKEC, ISRO	02	54
Joy of Giving	SAKEC and Zilla Parishad School, Posariwadi, Panvel	10	9
OUTBOUND to MIDC	SAKEC Computer Engineering Department and CSI	-	35

3.4.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
Education Leadership Award	ABP NEWS National Education Awards jury	ABP NEWS National Education Awards jury	-
Priar Technoworld RHA meet & Greet 2019	Awarded as Academy of Year 2019 for its Excellent coordination, Best support and stand for students.	Priar Technoworld	-

3.4.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers coordinated such activities	Number of students participated in such activities
Institute Social Responsibility	SAKEC and Zilla Parishad School, Posariwadi, Panvel	Joy of Giving	10	10
Corporate Social Responsibility	SAKEC ACM	Beach clean Up	4	15
Corporate Social Responsibility	SAKEC ACM	Visit to Gaushaala	2	8

3.5 Collaborations

3.5.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant		Source of financial support	Duration
Internship	Faculty	Prof Asha Durafae	-	-
	Student	Patil Saurabh	-	10/06/19 To 10/07/19
		Mishra Sunny	-	10/06/19 To 10/07/19
		Sabarwala Usham Singh Pritpal	-	23/12/19 To 07/01/20
		Patel Yash Mukesh	-	10/06/19 To 10/07/19

3.5.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	Participant
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	Suraj Gupta

Internship	Industrial Training	Orange Business Services, Vashi	27th Nov.2019-17th Jan 2020	OmkarKarekar
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	AnushkaKashyap
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	Chilveri Naveen
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	KunduDebanik
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	DhumakKunal
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	Jain Shubham
Internship	Industrial Training	Supertech Instrumentation Services(I) Pvt Ltd	23 rd December 2019- 07 th January 2020	Sabarwala Usham Singh Pritpal
Internship	Industrial Training	Detection Instruments, Mahape	1st Dec 2019-31st Dec2019	SiddheshPalekar
Internship	Industrial Training	Supertech Instrumentation Services(I)Pvt Ltd	10/06/19 To 10/07/19	Patil Saurabh
Internship	Industrial Training	Supertech Instrumentation Services(I)Pvt Ltd	10/06/19 To 10/07/19	Mishra Sunny
Internship	Industrial Training	Supertech Instrumentation Services(I)Pvt Ltd	10/06/19 To 10/07/19	Patel Yash Mukesh

Internship	Industrial Training	Prolific Systems and Technology Pvt Ltd, Thane	11 June 2019-10 July 2019	Ayush Patel
Internship	Industrial Training	Prolific Systems and Technology Pvt Ltd, Thane	11 June 2019-10 July 2019	KhushiKhetia
Internship	Industrial Training	UnitopAquacare Ltd, Thane	10 June 2019-10 July 2019	YogeshVishwakarma
Internship	Industrial Training	UnitopAquacare Ltd, Thane	13 June 2019-10 July 2019	Pratik Barot
Internship	Industrial Training	ONGC	6th June 2019-7th July 2019	Vishal Kattimani
Internship	Industrial Training on Train Management System	Central Railway, Mumbai	10/06/2019 to 22/06/2019	Mohammad Aiyob
Internship	Content Writing Internship	BestMom.org (Online)	10/4/20 to 10/6/20	Utkarsh Gohil
Internship	Digitech Intern	Student Alliance LPP (Online)	20/4/20 to 20/6/20	Siddhant Sharma
Internship	Business Development Intern	Expertrons (Online)	29/4/20 to 13/7/20	Khushi Punmiya
Internship	Business Development Executive Internship	Plutus Mart (Online)	1/7/20 to 1/8/20	Khushi Punmiya

Internship	Marketing Intern	Image Creative Education Private (Online)	14/5/20 to 14/7/20	Khushi Punmiya
Internship	Funds raising for children	Muskurahat Foundation	24/4/20 to 24/5/20	Khushi Punmiya
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Khushi Punmiya
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Siddhant Sharma
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Vibha Manral
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	VADHAN NIR KHETSHI
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Jigar Dharmendra Lapasia
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Khushank Mehta
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Parth Hitesh Powale
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Aagam Vora
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Ritu Dilip Patil

Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Mohit Chandrakanth Naik
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Vipulkumar Singh
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Anushka Chaube
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Pendbhaje Shreyas Rajesh
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Mrugank Tanna
Internship	IoT and Interfacing boards	Electronics Department, SAKEC (Online)	20/5/20 to 31/5/20	Ananya Gore
Internship	Machine Learning with python	Diginique Teclab	1/6/20 to 15/7/20	Ammar Suleman Khot
Internship	HR Executive	Dialogues media	10/6/20 to 11/7/20	Roopali Shetty
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Gore Ananya Ashish
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Pathya Jageshwar K.

Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Chheda Jay
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Choudhary Harish
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Mrugank Tanna
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Vipul Singh
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Trushti Chotaliya
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Sejal Madrecha
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Dyuti Kamdar

Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Dhanraj Mhatre
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Akhil Chheda
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Siddharth Soni
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Vedant Madane
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Naik Mohit Chandrakant
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Kothari Rachit Chetan
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Omkar Maurya

Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Diksha Pawar
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Shubham Raut
Internship	Microcontroller Programming skill Development workshop	EXTC Department, SAKEC	16/12/19 to 3/1/20	Parth Powale
Internship	Internship	Bhabha Atomic Research Centre	June – July 2019	Ria Sapra
Internship	Internship	Reliance Corporate Park, Navi Mumbai	June – July 2019	Tadepalli Saurabh
Internship	Internship	Larsen & Tourbo, Mumbai	June – July 2019	Savadia Harnish Sanjay
Internship	Internship	Bhabha Atomic Research Centre, Mumbai	June – July 2019	Doshi Parth
Internship	Internship	Tata Consultancy Services, Mumbai	June – July 2019	Pokharna Nikki
Internship	Internship	Tata Consultancy Services, Mumbai	June – July 2019	Bamboli Niraj

Internship	Internship	Tata Consultancy Services,Mumbai	June – July 2019	Jain Ruchir
Internship	Internship	Tata Consultancy Services,Mumbai	June – July 2019	Korla Sneha
Internship	Internship	Punjab Maharashtra Co-op Bank,Mumbai	June – July 2019	Gari Taher
Internship	Internship	Bharat Petroleum Corporation Ltd,Mumbai	June – July 2019	Shetia Yash
Internship	Internship	Bharat Petroleum Corporation Ltd,Mumbai	June – July 2019	Mehta Dharmi
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Shirwalkar Sali
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Parmar Mahima
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Chavan Aditi
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Lalit Lakshmanan
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Ghate Raj
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Vora Yash

Internship	Internship	Larsen & Tourbo Ltd.,Mumbai	June – July 2019	Panchal Kinnary
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Rohan Sapra
Internship	Internship	National Information Centre,Mumbai	June – July 2019	Karan Khadayate
Internship	Internship	National Information Centre,Mumbai	June – July 2019	Prinkle Singharia
Internship	Internship	PMC Bank	June – July 2019	Angad Gosain
Internship	Internship	Harrier Information Systems Pvt Ltd	June – July 2019	Preet Jain
Internship	Internship	Sahu Technologies	June – July 2019	Thanki Hetvi
Internship	Internship	Jones lang LaSalle Property Consultants(India) Pvt.Ltd	June – July 2019	Parth Gite
Internship	Internship	Indian Institute of Technology Bombay	June – July 2019	Aayush Doshi
Internship	Internship	Indian Institute of Technology Bombay	June – July 2019	Chintan Chheda
Internship	Internship	Bhabha Atomic Research Centre,Mumbai	June – July 2019	Jain Palash

Internship	Internship	Siemens Ltd., Navi Mumbai	June – July 2019	Sadwilkar Omkar
Internship	Internship	Rashtriya Chemicals & Fertilizer Ltd.,Mumbai	June – July 2019	Naik Deepesh
Internship	Internship	Rashtriya Chemicals & Fertilizer Ltd.,Mumbai	June – July 2019	Vora Rushabh
Internship	Internship	Larsen & Tourbro Infotech Ltd.,Mumbai	June – July 2019	Jain Shubhamkumar
Internship	Internship	Larsen & Tourbro Infotech Ltd.,Mumbai	June – July 2019	Gupta Kshitij
Internship	Internship	Rashtriya Chemicals & Fertilizer Ltd.,Mumbai	June – July 2019	Malaye Harsh
Internship	Internship	Rashtriya Chemicals & Fertilizer Ltd.,Mumbai	June – July 2019	Shenoy Anjali
Internship	Internship	DEZIGNOLICS	June – July 2019	Grishma Gupta
Internship	Internship	MHM's Outcome based Education	June – July 2019	Parth Mota
Internship	Internship	mUni campus	June – July 2019	Viraj Shetty
Internship	Internship	Synthesis Learning	June – July 2019	Kanishk Harde

Internship	Internship	Brainheaters	June – July 2019	Simran Jindal
Internship	Internship	Navlakhi Studio	June – July 2019	Henil Jain
Internship	Internship	Digital Freedom Foundation	June – July 2019	Jainam Doshi
Internship	Internship	Digital Freedom Foundation	June – July 2019	Nirali Dodhia
Internship	Internship	River Route Creative Group	June – July 2019	Shubham Bafna
Internship	Internship	Wishtel Pvt Ltd	June – July 2019	Kevin Gandhi
Internship	Internship	Namita's Fitness Hub	June – July 2019	Riddhi Dagha
Internship	Internship	The Side Project	June – July 2019	Chinmay Kawle
Internship	Internship	Art of living, Autocad and Mapping	June – July 2019	Rakesh Choudhary
Internship	Internship	Bharat Petroleum Corporation LTD.	June – July 2019	Shalin Gund
Internship	Internship	Flying Stone India Film Production Services	June – July 2019	Varad Varavadekar

Internship	Internship	15 February 2020	June – July 2019	Ashi Gala
Internship	Internship	Art of living (Research Cell),	June – July 2019	Shubham Bafna
Internship	Internship	GCV	June – July 2019	Riddhi Dagha
Internship	Internship	Creative Finserve Private Limited	June – July 2019	Satyam Gupta
Internship	Internship	hiigher. Co	June – July 2019	Dharmi Mehta
Internship	Internship	Rashtriya Chemical & Fertilizers Limited	June – July 2019	Anjali Shenoy
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Dhruvi Jain
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Vidya A.
Internship	Internship	Mad Infotech	June – July 2019	Shweta Solanki
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Vatsal Gada
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Rushi Shah

Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Shraddha Pawar
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Priyanka Singh
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Gunjan Vora
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Kartik Jain
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Prachi Khatri
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	V.Pillai
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Shivani Mehta
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Mugdha Basak
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Ruchir Jain
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Shivali Kakade
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Shiddhi Kadam

Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Soham Mehta
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Vatsal Gada
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Shubham Misar
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Sneha Korla
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Krutik Patel
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Rutvi Bheda
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Kajal Padhiyar
Internship	Internship	SAKEC	5/12/2019 to 6/1/2020	Kartik Jain
internship	news application development project	FAFADIATECH, 703, De Elmas, Sonawala Cross Lane Number 2, Sonawala Industry Estate, Goregaon, Mumbai, Maharashtra 400063	02/12/2019 31/12/2019	Kupal Vora
Internship	Internship	ANV Infotech Pvt. Ltd.	07/12/2019 27/01/2020	Rohit Misra

Internship	Marketing And Sales	Kanakia Spaces	27/11/2019 18/12/2019	Amish Siyal
internship	Web development	Dezignolics Web and Software	11/12/2019 26/12/2019	Shaikh Mohd Sahil
internship	Web development	Dezignolics Web and Software	11/12/2019 26/12/2019	Shubham Sawant
Internship	Web development	Dezignolics Web and Software	11/12/2019 26/12/2019	Danish Siddiqui
Internship	Web development	Dezignolics Web and Software	11/12/2019 26/12/2019	Hitesh Swami
Internship	Internship	Larsen & Toubro Limited,Powai,Mumbai	21/06/2019 30/07/2019	Niyati Shah
Internship	Internship	Ezzix Technologies Pvt.Ltd.	19/08/2019 10/09/2019	Aniket Thakker
internship	Internship	AOL Water Conservation Project(Research Cell Sakec)	06/12/2019 Ongoing	Pooja Tripathi
Internship	made a report on power bi taught mssql ,sap,excel	Larsen & Toubro Limited,Powai,Mumbai	02/12/2019 02/01/2020	Surbhi Desai
internship	made a report on power bi taught mssql ,sap,excel	Larsen & Toubro Limited,Powai,Mumbai	02/12/2019 02/01/2020	Deegesh Gala

internship	Web development	Sahu Technologies	01/06/2019 01/07/2019	Amisha Das
internship	Web development	Sahu Technologies	01/06/2019 01/07/2019	Riya Bhanushali
	Android application	azure skynet solutions	10 July 2019 10/8/2019	Chintan Doshi
Internship	marketting	woovly live project	1 August 2019 01/09/2019	Chintan Doshi
Internship	Internship	Trivia Softwares	January 2020 ongoing	Bhavya Shah
Internship	Internship	Trivia Softwares	July 2019 September 2019	Bhavya Shah
Internship	Internship	shah and anchor kutchhi engineering college	2nd december 2019 4th january 2020	DARSHIL HARIYA
Internship	Internship	Art of living	01-Jun-19 ongoing	KUSH VORA
Internship	Internship	Art of Living	01-Jun-19 ongoing	Nemil Panchamia
Internship	Internship	Art of Living	01-Jun-19 ongoing	Mit Virani
Internship	Internship	Art of Living	01-Jun-19 ongoing	vidhi shah

Internship	Internship	Rashtriya chemicals and fertilizers limited	01-Dec-19 31-Dec-19	ADITYA PAWAR
Internship	Internship	SimSol Technologies 317/A, Nirmal Lifestyle, Mulund (W)	01-Dec-19 ongoing	ABBAS MERCHANT
Internship	Android application	Indian development Foundation (SAKEC)	Mar2019 ongoing	Purtee Bhise
Internship	Android application	Indian development Foundation (SAKEC)	1 Sept 2018 ongoing	Avani H Ganatra
Internship	Android application	Indian development Foundation (SAKEC)	1 Sept 2018 ongoing	Upasana Singh
Internship	Android application	Roti bank	4 August 2018 ongoing	Raval Raj
Internship	Android application	Indian development Foundation (SAKEC)	22 July 2018 ongoing	Ved Ansh
Internship	Internship	Awign	03/07/2019 14/07/2019	Viraj Shah
Internship	Deduplication	Gcv pvt.Ltd. Andheri-kurla road,Bhim nagar,Andheri East,Mumbai,Maharashtra 400059	16/12/2019 Ongoing	Disha Jethva
Internship	IOT	Eduprime Technologies pvt ltd, Ghatkopar West	30 Sept 2018 Ongoing	PARTH JOSHI
Internship	Web Development	Olcademy work from home	30 June 2019 15 Oct 2019	Preet Nagda

Internship	Web application development	Nuclear Power Corporation of India Ltd, Anushakti Nagar, Trombay	1 Dec 2019 07 Jan 2020	Shruti Nair
Internship	Android Developer	VH Technologies Malad Mumbai	10 May 2019 10 Aug 2019	Rutvik Panchal
Internship	Android app development	Azure skynet solutions pvt ltd	09 Jul 2019 07 Aug 2019	Yash Jain
Internship	Web Development	Sahu Technologies	01 Jun 2019 01 Jul 2019	Asiya Khan
Internship	Internship	JUSTDIAL PVT LTD	17 Jun 2019 17 July 2019	Khurani Tej
Internship	Web based incentive calculator	Gcv pvt.Ltd. Andheri-kurla road,Bhim nagar,Andheri East,Mumbai,Maharashtra 400059	16th dec 2019 ongoing	Utsav gada
Internship	Web based incentive calculator	Gcv pvt.Ltd. Andheri-kurla road,Bhim nagar,Andheri East,Mumbai,Maharashtra 400059	16th dec 2019 ongoing	Siddhant Kadam
Internship	DeDuplicator	Gcv pvt.Ltd. Andheri-kurla road,Bhim nagar,Andheri East,Mumbai,Maharashtra 400059	16th dec 2019 ongoing	Bhavya Joshi
Intership-	SAKECBlue	Software Developer intern at Blue Eye Soft Corp	June 2020- July2020	Pallavi Pnadey
Internship-Developer	Blockology	Internship Blockchain development	23rdMarch 2020- June2020	Yash Rane

Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Dhwani Daftari
Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Keval Mehta
Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Dhairya Shah
Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Vivek Vadhiya
Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Varun Yadav
Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Rashmi Gori
Internship	Internship	Creative Finserve Pvt Ltd	June – July 2019	Deegesh Gala
Winter Internship	Water Conservation Project - Research Cell	Art of Living	01-Jun-19 ongoing	Hareh Bhanushi
Internship	Industrial Training	Unbox Innovations	Jun 19 – July 19	Rushabh D Botadra
Internship	Flutter Development	Interface Sense Consulting LLP	4 th May 19 - 11 th Sep 19	Shubham Phatale

Winter Internship	SLP internship	Shah and Anchor Kutchhi Engineering College	1 st Dec 19-30 th Dec 19	Hiral Makwana
Internship	App Development	Azure Skynet	9 th July 19 – 7 th Aug 19	Yash Jain

3.5.3 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organization	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs
The University of Naples 'Federico II'	25th Nov 2019	-	-
Azerbaijan Technical University	16th Dec 2019	-	-
STAR Certification	27th Jan 2020	-	-
University of North America, Virginia, USA	18th Mar 2020	Project Development	2 teachers - 7 students
Blue Eye Soft Corp	17th Jun 2020	Project Development A Hybrid International Webinar Series: Innovative & Emerging Technology in the field of Research	11 teachers-82 students
Art of Living International Association for Human Values (IAHV)	08th Jul 2019	Water conservation mapping 1. Internship At Art Of Living 2. Meeting with sri sri Ravishankar Watershed Management Project Launch View Activity Report	13 teachers-92 students
Arihant Media Solutions	26th Jul 2019	AMS GuidenGrow project	2 Teachers-15 Students
Namita's Fitness Hub	23rd Jul 2019	Project Development - Namita's Fitness Hub Website	1 Teacher – 7 Students

GCV Life Pvt. Ltd.	4th Dec 2019	Project Incent, Deduplication, Web based dashboard Industrial visit and training program	3 Teachers – 12 Students
ET Mantra eLearning Solutions Pvt. Ltd	24th Oct 2019	Learning Objective Repository	2 Teachers -3 Students
Skinzy® Software Solutions Pvt. Ltd.	26th Dec 2019	Project Development - Dermatika	2 Teachers - 16 Students
Creative Finserve Pvt. Ltd	30th Jan 2020	Project Development- Website, Android App, CRM Solution, Calculator, DBMS	8 Teachers - 54 Students
Revolux	7th Feb 2020	A Hybrid International Webinar Series: Innovative & Emerging Technology in the field of Research	-
Tata Institute of Social Sciences (TISS)	26th Feb 2020	A Hybrid International Webinar Series: Innovative & Emerging Technology in the field of Research	-
Dr Ramesh Sharma's Health Care Centre	17th Feb 2020	Project Development	1 Teacher -3 Students
Bennett University	5th Dec 2019	Dive into Deep learning Celebration of Collaboration with project launch -2019	-

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
50.00 Lakhs	48.665 Lakhs

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	6189sqm	-

Classrooms	34+08(Tutorial Room)	-
Laboratories	54	-
Seminar Halls	06	-
Classrooms with LCD facilities	30	-
Classrooms with Wi-Fi/ LAN	34+(08 Tutorial Room)	-
Seminar halls with ICT facilities	06	-
Video Centre	-	-
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	43	-
Value of the equipment purchased during the year (Rs. in Lakhs)	110.18Lakhs	-
Others1. Lab Renovation	-	03nos
2.Washrooms Renovation	-	04nos
	-	

4.2 Library as a Learning Resource

4.2.1 Library is automated {Integrated Library Management System -ILMS}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
Library (In-house Software)	Fully	December2019	2000

4.2.1 Library Services:

4.2.1 Library is automated {Integrated Library Management System -ILMS}						
Name of the ILMS software	Nature of automation (fully or partially)		Version		Year of automation	
Library (In-house Software)	Fully		December2019		2000	
4.2.1 Library Services:						
	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Textbooks	22131	82.14Lakhs	1137	13.21Lakhs	23268	83.47Lakhs
Reference Books	1166	10.32Lakhs	0	0	1166	10.32Lakhs
e-Books	1373	2.05Lakhs	1373	2.12Lakhs	1373	2.12Lakhs
Journals	48	5.17Lakhs	50	1.53Lakhs	50	1.53Lakhs
e-Journals	1263	49.82Lakhs	1263	51.04Lakhs	1263	51.04Lakhs
Digital Database	06	51.88Lakhs	06	53.16lakhs	06	53.16Lakhs
CD & Video	2600	Free	24	Free	2624	Free
Library automation	Yes	-	Yes	-	Yes	-

Weeding (Hard & Soft)	364	32,136/-	-	-	364	32,136/-
Others (specify)	-	-	-	-	-	-

4.3 IT Infrastructure

4.3.1 Technology Up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available band width (MBPS)	Others
Existing	1007	33	150MB PS	33+Library	01	01	04	150MBPS	-
Added	49	-	200MB PS	-	-	-	-	200MBPS	Microsoft Teams
Total	1056	33	200MB PS	34	01	01	04	200MBPS	

4.3.2 Bandwidth available of internet connection in the Institution (Leased line)

2000MBPS Tata Communications

4.3.3 Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Google Classrooms, Digital Library, Intranet	-

4.3.4 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Sr. No.	Name of Faculty Member	Department	Classes	Div	Course/Subject	Innovative T_L strategy that you are planning to adopt	ICT Tool
1	Dr. Rekha Ramesh	Computer	TE	D	Data Warehousing and Mining	Think-Pair share (TPS). Peer Instruction Activity activity	Kahoot
2	Dr. Rekha Ramesh	Computer	BE	3	Natural Language Processing	Flipped Classroom Using NPTEL videos and test based on video content	NPTEL video Link and postest link uploaded on Google classroom
3	Dr. Archana Nath	Engineering Science	FE	I	Principles of spectroscopy/ Engineering Chemistry -II	Flipped Classroom Using NPTEL video on	Shared the video link

						spectroscopy and test based on video content	
4	Salabha Jacob	Electronics	BE	2	Digital Image Processing	Discussion Forum based on the video and presentations. Flipped Classroom using NPTEL video	NPTEL video and PPT uploaded in Moodlecloud
5	Shubhangi Motewar	Electronics	BE	2	IoT	Timebound Quiz on shared video on google classroom	Cisco Video
6	Smita Bansod	Information Technology	SE	6	Automata Theory	Timebound Quiz on shared video on google classroom	Screen Recoder
7	Bhargavi Dalal	Information Technology	TE	5	Sensor Network Lab	Discussion with students	Screen Recoder
8	Bhargavi Dalal	Information Technology	SE	5 & 6	COA	Video recording lecture Deliver in Google Classroom	Screen Recoder
9	Bhargavi Dalal	Information Technology	SE	5 & 6	COA	Quiz of COA and MPL	Quiz Competition on Google Classroom
10	Salabha Jacob	Electronics	TE	1 & 2	SS	Video lecture through google meet in google classroom done on Signals and systems Assignment and Practice questions	Assignment and Practice questions uploaded in google classroom
11	Dr. Kranti Vithal Ghag	IT	BE	6	IPR & P	Quiz of IPR & Patenting	Quiz on Google Classroom
12	Preethi Warriar	Electronics	SE	1	DSD	Google Meet video lecture	Vhdl programs of flip flops, registers, counters
13	Preethi Warriar	Electronics	SE	1	MPA	Google Meet video lecture	Explanation of Peripherals
14	Rameshwari Mane	Electronics	SE	1	DSD	Video lecture using google meet on ASM Chart. Used surface-pro and MS paint to explain the topic	Material uploded
15	Pramila Shinde	IT	SE	5 & 6	Automata Theory	Google Classroom post	Video Recording from Android Mobile for Shooting Video Lecture, CAMScanner for making PDF documents

16	Shridhar Sahu	EXTC	TE	7	Linear Integrated Circuits	Teaching using Bamboo Tablet	Subject Teaching
17	Bhushan Pawar	EXTC	TE	7	Antenna and Radio Wave Propagation	Teaching using Surface Pro	Subject Teaching
18	Dr. Vidyullata Devmane	COMP	BE	3&4	Cryptography and System Security	Google classroom	Created audio-video presentation for complex topics and shared through Google classroom

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
40.00 Lakhs	33.51233 Lakhs	140.00Lakhs	134.485 Lakhs

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (*maximum 500 words*) (information to be available in institutional Website, provide link)

1) Maintenance of Physical Infrastructure and Support facility

Cleanliness beautifies the campus, makes it delightful and makes focussing on study much easier. Knowing this, every effort is made to make the campus clean and beautiful. The Institute has a garden which is regularly maintained. Adequate human resources are deployed exclusively for maintenance and upkeep of campus infrastructure.

The Institute sees to it that all resources in the campus are always up and running. It is made possible by having a robust system and well-defined procedures for maintenance of all facilities. The procedure is followed as below for the maintenance: -

- The request for maintenance is entered in a register maintained by the Estate Manager at the Institute level.
- The maintenance schedule is then executed with the support of external agencies.
- Emergency maintenance is carried out on priority basis.

a) Routine Maintenance

- Cleaning, Dusting, Sweeping and Mopping of all areas is undertaken daily by the contractual housekeeping staff and is supervised by the supervisor.
- For minor repairs, the Institute has a workforce of carpenters and electricians.

b) Preventive Maintenances:

- Electrical maintenance: - The activities related to maintenance of electrical fittings, public address system, pump rooms etc. are supervised and done by the Institute's electrician.
- Air conditioning: - Many laboratories of the institute are air conditioned. The maintenance of the heating, ventilation and air conditioning system is outsourced.
- Lifts: All the lifts are maintained through AMC with Kone Elevators. Lift men are appointed in each lift to drop people at their required floors.
- Water coolers and purifiers: - The equipment maintenance is done by the contractual agency with which the institute has AMC.

- Pest control: - Pest control which includes combating general disinfection, rodent treatment and anti-termite is done periodically.
- Gymnasium: - A fully air conditioned and well equipped gymnasium facility is available for all the students. A full-time trainer is appointed in the gymnasium. The maintenance of the gymnasium is carried out by a contractual agency.
- Fire Extinguisher: - As a safety measure every floor is equipped with a fire extinguisher. Its maintenance is taken care of by the contractual agency. Also, water pipelines are available at each floor in case of fire emergency.
- Auditorium: - An elegant and spacious auditorium is available for conducting cultural as well as professional activities. It is maintained by the appointed staff of the Institute.
- Garden: - The cutting, cleaning, watering, soiling etc. Activities in the garden are done by the Institute's gardener.
- First Aid Kit: - First Aid Kit is available in each laboratory to handle basic emergencies which are annually checked for outdated medicines and replaced with new stock. The safety measures to be taken in case of emergency is displayed in each laboratory.

2) Maintenance of IT Infrastructure and Laboratory

The institute has a full-time maintenance engineer and an independent maintenance room for carrying out IT maintenance.

The laboratories are cleaned and dusted every day. Power cables are properly insulated and laid away from pathways.

Every laboratory maintains a complete record of the equipment such as dead stock Register, maintained by the laboratory in-charge along with laboratory assistant as and when new software or hardware is procured in the laboratory register. This register is updated. The overall maintenance of the laboratory equipments and installation of various softwares required is taken care of by the respective lab assistants. Minor repairs of the hardware kits and systems are handled by the lab assistants. Major trouble shooting is done by the maintenance engineer of the Institute.

3) Maintenance of library

The books are kept in good condition by binding them regularly. Review and discard of obsolete books are carried out periodically.

- Library Policy Link

<http://www.shahandanchor.com/library/wp-content/uploads/library-policy-manual.pdf>

- Classroom Maintenance Policy Link

<https://www.shahandanchor.com/home/wp-content/uploads/Classroom-Maintenance-Policy.pdf>

- Laboratory Maintenance Policy Link

<https://www.shahandanchor.com/home/wp-content/uploads/Laboratory-Maintenance-Policy.pdf>

- Sports Complex Maintenance Policy Link

<https://www.shahandanchor.com/home/wp-content/uploads/Sport-Complex-Maintenance-Policy.pdf>

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1 Student Support

5.1.1 Scholarships and Financial Support

	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	---	---	---
Financial support from other sources			
a) National	Government Sources	640	3,31,53,598/-
	Private Sector/NGO	12	5,95,000/-
b) International	---	---	---

5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.

Name of capability: Soft-Skill Development

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Personality Development and soft skill	17-07-2019	38	Prof.Shilpi Gupta,IBS organized by Training and Placement Cell
Group Discussion and Interview skills	22-07-2019	296	Training and Placement Cell

Group Discussion and Interview skills	23-07-2019	273	Training and Placement Cell
Group Discussion and Interview skills	24-07-2019	287	Training and Placement Cell
Group Discussion and Interview skills	25-07-2019	267	Training and Placement Cell
Group Discussion and Interview skills	26-07-2019	265	Training and Placement Cell
Group Discussion and Interview skills	26-07-2019	273	Training and Placement Cell

Name of capability: Remedial coaching

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Remedial coaching (ODD)	20/08/2019	1	Subject Teacher/Course In-charge
	20/08/2019	6	
	09/09/2019	07	
	11/09/2019	05	
	11/09/2019	13	
	21/0920/19	37	
	21/09/2019	8	
	21/09/2019	33	
	21/09/2019	7	
	21/09/2019	48	
21/09/2019	09		

	21/09/2019	6	
	21/09/2019	36	
	21/09/2019	33	
	21/09/2019	30	
	18/10/2019	30	

Name of capability: Language lab

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Language lab	ODD semester A Y 2019-20	952	Language lab faculty
Language lab	EVEN semester A Y 2019-20	429	Language lab faculty

Name of capability: Bridge courses

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Introduction to ML with Tensorflow 2.0	ODD semester AY 2019-20	20	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
World of IoT with NodeMCU	ODD semester AY 2019-20	34	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
Blockchain and Its applications	ODD semester AY 2019-20	59	Coordinators of professional body (ACM), head of departments, Registered students

Software Conceptual Design	ODD semester AY 2019-20	24	Coordinators of Professional Body (CSI), Head of Departments, Registered Students
Hands-on RedHat Linux	ODD semester AY 2019-20	41	Coordinators of Professional Body (ACM), Head of Departments, Registered Students
Hands on Amazon Web Services(AWS)& Docker	EVEN semester A Y 2019-20	37	Coordinators of Professional Body (ACM), Head of Departments, Registered Students
A Talk on ETHICAL HACKING AND CYBER SECURITY	EVEN semester A Y 2019-20	77	Coordinators of Professional Body (ACM), Head of Departments, Registered Students
Hands-on Workshop on Python & Django Web Frameworks	EVEN semester A Y 2019-20	64	Coordinators of Professional Body (ACM), Head of Departments, Registered Students
Star certification online teaching Webinar on Ethical Hacking	EVEN semester A Y 2019-20	100	Research Cell, SAKEC
Free Webinar on “AI & ML for Business Application	EVEN semester A Y 2018-19	139	Research Cell, SAKEC

Name of capability: Mentoring

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Mentoring	A Y 2019-20	1791	Batch Mentor, Student coordinator, head of department

5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2019-2020	Placement	GATE Mock Test =14	Higher Education in Germany and Europe = 41		
			An Awareness session on Overseas Education= 278		
			Stepping towards Higher Education in New Zealand for Engineering domain. =19		
			Student Development Program on "Industry expectations from Engineering Graduates" by Mr. Gaurav Ghelani, TCS = 167		
	Connect with work , 3 days workshop by Rubicon Institution Barclay's = 270				
	E-cell		549		

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal

0	0	0
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Institute has Grievance redressal committee has agenda to read and understand the mechanism for grievance redressal as per AICTE regulations, and to address the grievances received from students.

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus			Off Campus		
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
Allerin Talent Management	62	2	Cognizant Technology Solutions India Private Ltd	*All the eligible students according to organization criteria can participate	1
Atos Syntel Pvt Ltd	26	7	Eduprime Technologies Pvt Ltd		1
Byjus - Think & Learn Pvt Ltd	71	4	Embin Technologies Pvt Ltd		1
Capgemini Technology Services India Limited	174	42	Enviro Technologies		1
CodeArray Technologies Pvt Ltd	125	11	Erulearning Solutions Private Limited,		1
Course 5 Intelligence	60	1	Essentio Solutions		1
Dolat Capital Market Pvt. Ltd	74	1	Fidelis Corporate Solutions Pvt Ltd.,		1
Gracenote a Nielsen	55	3	Infosec Ventures		1
Infosys Limited	156	23	Jforce Solutions		1
JaroToppscholarsPvt Ltd	265	1	Marquistech Technologies Pvt Ltd		1
Larsen & Toubro Infotech Ltd.	191	43	Medirays Imaging Pvt Ltd		1
MAQ Software	109	3	QualityKiosk Technologies		1
Neosoft Technologies	131	6	Safari Kid		1
Nexus Solutions	29	2	Silverlink Technologies		2

Nividous Software Solutions Pvt Ltd	26	2	Ugam Solution Pvt Ltd	1
NSEIT Limited	228	11	Vedantu Innovations Pvt Ltd.	1
Nucsoft Ltd.	26	6	White Hat Jr.	1
Paperplane Solutions	60	1	Wipro Ltd	1
Paycraft Solutions Pvt Ltd	15	1	ZKTeco Biometrics India Pvt ltd	1
Reliance JioInfocomm Limited	95	17		
Sciative Solutions Pvt. Ltd.	17	2		
STREAM EdutechPvt Ltd	35	3		
SwabhavTechlabs Solutions Private Limited	23	1		
Tata Consultancy Services	230	41		
TresVista Careers System	34	2		
Vistaar Technologies Price Management Solutions	174	6		
Vistex Asia Pacific Pvt. Ltd	127	2		
Zeus Systems Pvt. Ltd	181	2		

5.2.2 Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2019-2020	1	Engineering and Technology	Computer Engineering	Rochester Institute of Technology, NewYork, United States of America	MS

2019-2020	2	Engineering and Technology	Computer Engineering	New York University, New York, United States of America	MS
2019-2020	1	Engineering and Technology	Computer Engineering	Conestoga College Institute of Technology and Advanced Learning , Ontario, Canada	MS
2019-2020	1	Engineering and Technology	Computer Engineering	University of New Haven , Connecticut, United States of America	MS
2019-2020	1	Engineering and Technology	Computer Engineering	University of Florida, United States of America	MS
2019-2020	2	Engineering and Technology	Computer Engineering	University of Texas at Dallas, Texas, United States of America	MS
2019-2020	1	Engineering and Technology	Computer Engineering	University of New Haven , Connecticut, United States of America	MS
2019-2020	1	Engineering and Technology	Computer Engineering	Indiana University Bloomington, Indiana, United States of America	MS
2019-2020	1	Engineering and Technology	Computer Engineering	NMIMS , Indore, India	MBA
2019-2020	2	Engineering and Technology	Computer Engineering	Indiana University Bloomington, Indiana, United States of America	MS

2019-2020	1	Engineering and Technology	Electronics Engineering	University of Texas at Dallas, Texas, United States of America	MS
2019-2020	1	Engineering and Technology	Electronics Engineering	Veermata Jijabai Technological Institute, Mumbai, India	MTech
2019-2020	1	Engineering and Technology	Electronics Engineering	Welingkar Institute of Management, Mumbai, India	PGDM
2019-2020	1	Engineering and Technology	Electronics Engineering	IIIT Bangalore, India	PGD
2019-2020	1	Engineering and Technology	Electronics & Telecommunication Engineering	University of Adelaide, Australia	MBA
2019-2020	1	Engineering and Technology	Information Technology	Symbiosis Centre for Information Technology, Pune, India	MBA
2019-2020	1	Engineering and Technology	Information Technology	Northeastern University, Boston, Massachusetts, United States of America	MS
2019-2020	1	Engineering and Technology	Information Technology	University of North Carolina, Charlotte, United States of America	MS
2019-2020	1	Engineering and Technology	Information Technology	Monash University, Melbourne, Victoria, Australia	MS

2019-2020	2	Engineering and Technology	Information Technology	Dublin city university, Dublin, Ireland	MS
2019-2020	1	Engineering and Technology	Information Technology	Tandon school of engineering, New York, United States of America	MS

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students selected/ qualifying	Registration number/roll number for the exam
IELTS	15	L8087601
		216813
		216707
		T6159292
		206793
		422844
		254366
		N6584541
		U1624247
		22754
		2952
		74387
		3149
		339953
		340018
GRE	25	6185976
		6186086
		6899340
		6187624
		6211796
		8654901
		8669859
		6257879
		5607049
		5971175
		6903841

		6149246
		6177410
		6143737
		5928525
		8505396
		6791514
		8617712
		8445194
		6280375
		6590055
		6136862
		6306303
		8165703
		8445194
TOFEL	16	5186511190968592
		4162212191503967
		3748111203375695
		1412612191148622
		3416409190760519
		4962210191010934
		3054212191505408
		5963709190755169
		2417712203678843
		5244212191456517
		7480310190895897
		5536012203569203
		5211410190929262
		8548211203474474
		5773711203426690
		8983612191322639
CAT	1	9090356
CMAT	2	MR1601104331
		MR1601102317
GATE	3	CS20S62051219
		CS21S62052730
		EC20S420439152

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
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Cricket	Institute Level	165
Carrom Boys	Institute Level	25
Carrom girls	Institute Level	8
Badminton Boys	Institute Level	30
Badminton Girls	Institute Level	45
Basketball Boys	Institute Level	28
Basketball Girls	Institute Level	28
Chess Boys	Institute Level	11
Chess Girls	Institute Level	9
Football	Institute Level	150
Volleyball	Institute Level	56
Boxcricket	Institute Level	32
TT Boys	Institute Level	32
TT Girls	Institute Level	13
Kabaddi	Institute Level	130
TOG boys	Institute Level	100
TOG Girls	Institute Level	57
Throwball	Institute Level	54
Dodgeball	Institute Level	12

5.3 Student Participation and Activities

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

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
2019-20	Badminton singles, VJTI	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Badminton doubles, VJTI	National	Sports		G2018IT1721	Prishita Sinha

2019-20	Badminton singles, SPIT	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Badminton singles, The Chembur gymkhana	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Badminton singles, The national sports club of India	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Badminton singles , ICT	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Badminton singles (U-19), The Chembur gymkhana	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Badminton singles , Excelsior	National	Sports		G2018IT1721	Prishita Sinha
2019-20	Atheletics SPIT	National	Sports		C2019EX1205	Sakshi Raorane
2019-20	Fashion Show	National	-	Cultural		Aish Kaur
					C2017IT2611	Jaspreet Kaur Kandola
2019-20	DRAMA				M2016IT1665	Vinit Savla
					C2017CM-D2201	Khan Amina Akhtar
					G2018ETC1831	Rachit Kothari
						Deepak jha
					G2017IT1681	Parnika Mhatre
					G2016IT1704	Shreyas Bansode
					I2018IT1720	Harsh Hingu

					C2013EX100296	Shriniwas Ghadyalji
						Adit Gandhi
					C2018ETC1808	Mohit Naik
					C2018CM-D2207	Siddhi Salvi

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

SAKEC aims for all round development of students and hence has established a student council at institute level. The primary objective of creating a Student Council is to assimilate and integrate the students from all the constituent departments to provide them with a platform to harness their creative activities in an integrated manner. The Student Council mainly promotes collective and constructive leadership within the student community. Each year, class representatives are selected from the academically good students, General secretary is elected through election amongst the class representatives while the Sports and Cultural Secretary along with the ladies representatives.

The Student council, being the apex body organizes various activities with the help of the other cells. These student body Cells along with the student council keep students engaged in activities apart from their regular academic work and showcase their talents. The students also get an opportunity to attend the seminars and Workshops of eminent personalities that are held all-round the year by various cells of the institute.

Pixel, Nucleus - the technical fest, and Prathistha – the cultural fest are some of the most looked upon events that enrich the experience of the student's community. These events provide a platform for the students to showcase their talents and nurture them. They help in the development of the Institute and society by conducting various interactive programs with the faculty, administrative staff, and students.

Apart from these, we have events and competitions conducted by the various Cells which keep the students active throughout the year. To strengthen curriculum, delivery strategies and activities, college constituted a Department Advisory Board (DAB) which comprises students representative along with representatives from various industries, organizations and stakeholders of the institute thereby generating a mechanism for providing precious and valuable inputs to various departments at the institute. The institute has an Anti-Ragging Committee to ensure that measures for prevention of ragging and monitoring mechanisms are in place. The Committee comprises representatives of students belonging to the fresher's category as well as senior students.

SAKEC provides holistic learning experience to develop managerial capabilities of its graduates. It has well defined processes in place to help students develop their leadership and decision-making skills. It encourages student participation in various domains and has a plethora of cells and committees dedicated to providing the students with means to express their talents. Several events are organized by various cells under the guidance of faculty in charge. Students participate in several co-curricular activities. Such an engagement facilitates overall grooming, and the college encourages all these co-curricular activities and actively supports them. Every student cell is assigned to faculty in charge and the faculty provides guidance and mentoring support to the student clubs. The following cells facilitate student development under the mentorship of the respective faculty in charge.

- Student Council
- IEEE Student Branch
- IETE Student Forum
- ACM Student Chapter
- CSI Student Chapter
- IIC SAKEC 2.0
- SAKEC Robo-Club
- SAKEC E-Cell
- Research Cell
- Speakers Club
- Sambhodhi

5.4 Alumni Engagement

5.4.1 Whether the institution has registered Alumni Association?

No (Registration is in Process)

5.4.2 No. of enrolled Alumni:

No

5.4.3 Alumni contribution during the year (in Rupees):

Nil

5.4.4 Meetings/activities organized by Alumni Association

to its future. Alumni serve many valuable roles, such as helping to build and grow an institution's brand through word of- mouth marketing. Creating an engaged, supportive alumni network is crucial to an institution's success.

SAKEC Alumni cell started functioning immediately after establishment of the institute and events are held and interaction is occurring on regular basis. Institute maintains a strong and affectionate bond with its alumni which helps to grow not only in the educational field but also socially.

SAKEC Alumni plays an active role in voluntary programs like mentoring students, facilitate internship and in placements.

Following are the key areas where our alumni significantly contribute to our institute

1. **Career Guidance and placement:** Alumni play a critical role in guiding students to find good placements. This enhances the students' experience and gives them that competitive edge in today's tough job market. Alumni can help students get placed at their respective organizations.

2. **Mentorship:** Alumni provide a platform to foster meaningful mentoring relationships between alumni and current students by conducting various events to enrich their experience. Alumni guide students in project competitions.

3. **Internship:** Alumni play a significant role in providing Internship to deserving candidates in their organization.

4. **Professional Networking platform:** Alumni association is an immense network of professional contacts by providing a networking platform to the current students to achieve success in their career.

5. **Workshop and Seminars:** Alumni, with the wealth of experience and skills conduct different workshops and seminars to guide students in different technical domains, via talks and meets.

SAKEC Alumni Association, helps to foster and bridge the interaction between the institute and its Alumni. Many of the alumni are willing to express their gratitude to their alma-mater, for nostalgia and to learn about the new achievements of the college.

SAKEC celebrates Annual Alumni meet “**SAMPARKA**” every year. SAMPARKA gives every SAKEC alumni an opportunity to interact with other alumni members and their teachers. They can share their experience in the outside world, which they faced after stepping out of the institution. Motivational talks are given by our alumni. Feedback from alumni is collected and analysed.

SAKEC Alumni Association maintains good **relations** with alumni and keeps track of them by maintaining their database, collecting their current employment details, connecting with them on LinkedIn, Twitter and Instagram, and by creating content worth sharing with Alumni. Alumni talks and sessions are also conducted on a regular basis.

SAKEC Alumni association have members from our college management, principal, teaching staff members, prominent alumni working in reputed organizations, thereby making it a strong team.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

Shah and Anchor Kutchhi Engineering College was established in 1985 for the purpose of imparting quality technical education. The college is managed by Mahavir Education Trust. The college is approved by AICTE, New Delhi and Government of Maharashtra, and is affiliated to University of Mumbai. It also has an ISO Certification. It offers undergraduate courses in Computer Engineering, Information Technology, Electronics Engineering and Electronics & Telecommunication Engineering.

Our Vision -

“To become a globally recognized institution offering quality education and enhancing professional standards”

6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Shah and Anchor Kutchhi College of Engineering promote and practices decentralization in all academic and administrative activities. It has various academic and administrative committees to monitor, plan and execute smooth functioning of the Institute. Institute has Local Management Committee (LMC) body comprising of management board, Principal, Staff, support staff, student, parents representatives. Once a year LMC meeting is conducted where activities and results of previous year are discussed and action plan for next academic year is decided.

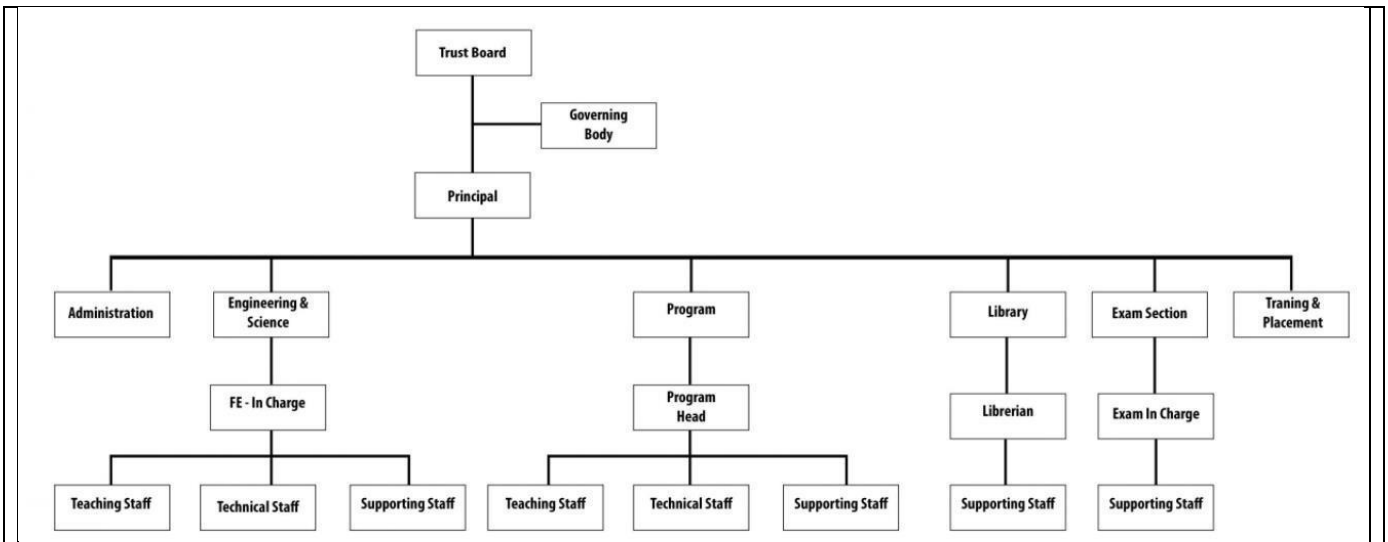
Apart from LMC meeting the institute also conducts regular meetings of staff with Principal and HODs. Work allotment and proper distribution of load is done during these meetings. Opinions and ideas from the staff are sought. There are In charges for every professional body, and the respective In-charge, with the help of his team, decides the plan of activities for every semester. Various bodies like IEEE, IETE, ISTE, ACM, etc operate independently for the benefit of staff and students.

Institute has well organized procedure for purchase of equipment and consumable materials/components. Requirements are submitted by the subject in-charge to the HOD, quotations are ordered for the purchase by HOD after obtaining approval from the Principal, funds are provided by management.

Conduction of Examinations and evaluation of Answer books and preparation of Results are implemented examples of decentralization wherein conduction of Examination is facilitated through senior Supervisors, overseen by the In-charge Examination and Evaluation of Answer Books are facilitated through CAS (Centralized Assessment Scheme) In-charges and overseen by In-Charge Examination.

The above processes are the examples of decentralization and participative management, as a result of which we ensure their smooth execution.

SAKEC is managing through Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies. Hierarchy is shown below:



6.1.2 Does the institution have a Management Information System (MIS)?

Yes/No/Partial:

Yes, we have institute level ERP System where staff attendance, student attendance, exam functions, student fees, Examination fees and all are managed through software.

We have Met-smart web portal which lets both staff and students log into it. The staff members can retrieve information about leaves, attendance, and leave applications. Staff can enter student attendance also send SMS to concerned students regarding important information.

Academic calendar, Timetable, Student roll call lists, notifications related to students' fee, upcoming events and examination are posted well in advance on institute website. Information regarding different student chapters and cell are available on Website.

Students have to fill on-Line Exam forms for the University Level Exams (Semester- 1, 2, 7&8). College ERP is well built to handle the College Level Exams. Hall tickets are also auto generated by the College ERP. Internal Assessment, Term Work, Oral and Practical marks are uploaded by the respective internal examiners in the College ERP.

Computer department also has Departmental Information Management system. Departmental Information Management System. DIMS-V2 is updated with additional functionalities such as lab attendance and mentee information in which we can see mentees list of respective mentor along with attendance record and internal assessment marks.

6.2 Strategy Development and Deployment

6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

❖ Curriculum Development

- Faculty of our institution participate in Syllabus and Scheme design programmes conducted by the university.

- Our institution also conducts orientations of new subjects and syllabus on behalf of Mumbai University. All members discuss about curriculum, books, tentative experiments etc.
- Staffs from our institution are deputed to other colleges to participate in orientation courses for new subjects.
- Domains are created based on the area of specialization of faculty, domains are allocated to them and the Domain In-charges supervise the courses under each domain.
- Domain in charge identifies gaps in syllabus. Domain in charge informs GAPS in syllabus to Mumbai University and corrective measures are taken. At our college we include Assignment, Quiz or other ICT methods like Think Pair and Share, to fill the gaps in syllabus.
- Beyond the curriculum, Industrial Visits, Internship, Smart India Hackathon, Workshop, Seminars, Project Competitions are organised.

❖ Teaching and Learning

Processes followed to improve quality of Teaching & Learning

● Academic Calendar

The Academic Calendar of the Institute is based on the academic calendar of Mumbai University. The Calendar includes the activities planned for the Program. The staff members and students adhere to the calendar of events to meet the department's planned events

o Interactive Classrooms- Improvements in technology make teaching effective. Faculty members prepare PowerPoint presentation of the contents for the course and teach the students using Projector and Surface Pro. The students understand the subject in a better way when the faculty members use both blackboard and projector as the teaching aids.

o Teaching /Learning Resources-

- To improve the teaching/learning process, some of the faculty members use Google Classroom for their respective courses.

- Quiz and Assignments are conducted using Learning Management System (LMS)

- The faculty members also share their notes with the students.

- Providing resources by NPTEL, Spoken Tutorial and Digital library. Students are aware and utilize the expertise of academic excellence available on other platforms outside the classroom.

o Information and Communication Technology (ICT) usage: Students are provided with knowledge and proficiency in the usage of simulation softwares like SPSS Clementine, MATLAB, NS2 etc. which are also available for students. Students are well trained to use these tools and softwares in the laboratory.

o Innovative practices in Teaching and Learning: For Innovation in teaching and learning process faculty use different teaching methodologies like Think Pair Share to interact with students and relate to the course in a better way

● Methodology to support weak students and encourage bright students

o Support weak students

- Remedial lectures are conducted by the faculty to support weak students.

- Mentors counsel weak students to improve their overall performance.

o Encourage bright students

- Meritorious students are awarded gold & silver medals every Academic year.

- Students are encouraged to participate in various competitions (Smart India Hackathon, Technical paper publications and Project competitions)

- Various Student Chapters viz. IEEE, ACM, CSI, ISTE, IETE are formed to encourage students to participate in various events.
- Special Study Group (Cyber Security and Forensic Specialist Study Group, Internet of Things (IoT) Study Group, and AI & Deep learning) are formed for a specialized area of learning where students & faculty interact and share knowledge.

❖ Examination and Evaluation

● **Internal semester Question paper**

- The internal assessment is scheduled as per the academic calendar.
- After the assessment, solution & marking scheme is prepared. The papers are assessed as per the marking scheme.
- The papers are shown to the students & doubts regarding the evaluation are resolved.

● **Assignment**

- In class Assignments are given to the students for assessing their knowledge on different topics. Course Co-ordinator prepares the assignment according to the lesson plan and subject matter covered. The assignment questions are mapped to COs.
- The literature survey is an indirect activity for students which promote self-learning through the usage of the digital library. Assignments are given with respect to the Literature Survey.
- Our institute declares result of end semester examination of semester III,IV,V, VI within one month of last paper with zero errors.

Every year top students of every department are felicitated by Gold Medals and Silver medals. Individual subject toppers are also rewarded with certificates.

❖ Research and Development

The institute has constituted a research cell, research committees to monitor and address the issues related with the research.

Various internship opportunities from industry and projects are provided to the students to enhance their research and professional skills.

It also ensures that the necessary research facilities and infrastructure is available. The committee also ascertains the quality of the research work being communicated by the students to the various referred journals and see to it that it is free from any sort of plagiarism using Urkund Tool.

Many of our projects offer opportunities in fundamental research that are focused to tackle live problems. The projects under the banner of SAKEC Research Cell work for the benefit of industry and society. We have projects in collaboration with various organizations such as Bombay Leprosy Project (BLP), Roti Bank Mumbai, Waggy Tails Private Limited, Digital Freedom Foundation (DFF).

❖ Library, ICT and Physical Infrastructure / Instrumentation

- **Library:** College library resources comprises of Reference Books, magazine, journals, compact disc systems & Digital Library facilities. Library has Internet facility centre for student. The institution provides online subscriptions for IEEE, ScienceDirect, ASTM, JGATE, SPRINGER, SCOPUS, Videeya

Ebooks & MCGRAW-HILL BOOKS. Syllabus and Previous year University Question Papers. Online Repository of course material. Library is a source of variety of books related to curricular and co-curricular. It also consists of periodicals which are helpful to students for self learning.

- **Information and Communication Technology (ICT) usage:**

ICT facility is extended for the Teaching-Learning Process by means of LCD-Projectors, Smart Classrooms, 100 Mbps leased Line Connectivity with WiFi.

Infrastructure: Keeping in-line the Vision and Mission of the Institute, the Institute strives to create an excellent academic environment. In addition to well-equipped laboratories and motivated teachers, facilities like LED TV displays, CCTV Surveillance, Public Addressing System, Intranet, WiFi access, Girls Common Room, Gymnasium, Canara Bank and study areas are present in the campus.

Facilities for Cultural, Sports and Technical events are provided by the institute. The establishment of a digital library, various Student Chapters, Student Council, various cells are initiatives taken by the institute towards achieving the vision of the institute.

- **Auditorium**

SAKEC provides state of the art auditorium with a seating capacity for 250+ people that act as a common ground for students, faculty and corporate personalities for regular interface, conference and other events.

- **Seminar Hall**

To promote e-based teaching-learning methodology, air-conditioned Seminar Rooms are constructed at our College. The advancements in technology have benefited one and all. Our students and faculty are no exception. They use the latest multimedia system with large digital screens to display their visually based demonstrations and graphics oriented lessons. SAKEC organizes online lectures and conferences with eminent professors and stalwarts across the globe in various fields of Engineering and Technology for the overall development of students.

- **Gymnasium**

Our modern gymnasium has state of the art equipment, an air conditioned environment and is fully supervised at all times & features specialist equipment for users. The SAKEC gymnasium is a full-service fitness facility available to the students free of cost.

- **Girls Common Room**

SAKEC provides a large state-of-art separate female student common area, allowing freedom for students to socialise and catch up with assignments. Within the student common area, there are gym equipment with professional sports trainer to live fit and healthy. Additionally, the college offers a self-contained microwave oven and kettle.

- **Bank**

Canara Bank has its own extension counter specially for SAKEC Staff and students, within the campus. It is accessible easily and the staff and students of the institution can conveniently complete all their bank transactions.

❖ Human Resource Management

In Institute recruitment is done as per norms and regulation as recommended by Govt. of Maharashtra. There are two types of recruitments for teaching staff, one is through USC (University Selection Committee) and the other is at the College Level (Ad-hoc appointments) against the sanctioned vacancy. The vacancies are advertised in national and local news papers and interviews are conducted by eminent panel of experts. Recruitments of security, cleanliness staff is outsourced to agencies.

As per Maharashtra government norms, gratuity, provident fund, medical insurance and Group medical Insurance is given to teaching and non-teaching Staff.

To encourage higher studies and to enhance academics as well as the career of teaching and nonteaching staff leave facility is given to deserving candidates wanting to pursue higher studies.

To encourage extra co-curricular activity all staff members are allowed to participate in college sports and Cultural activities. To encourage the faculty members to participate in Research and Development activity, sponsorship is provided for participation in workshops and conferences as per policy.

❖ Industry Interaction / Collaboration

Industrial visit is a part of college co-curriculum during which students visit companies and get insight regarding the functioning of the industry.

Every department has an advisory board which has experts from the industry to bridge up the curriculum/ industry gap and suggest quality improvement.

Experts are invited from various MNCs and other industries to deliver lectures on recent trends.

Students are encouraged to do outhouse projects and to participate in different competitions to get industrial exposure.

Industry-academia interactions are further strengthened by sending the students for internship in companies.

E-cell /Industry Institute cell, T&P cell, Research cell and all Professional bodies in the institute take care of all the activities related to industry interaction

❖ Admission of Students

- Admission to the Institute is done by Directorate of Technical Education (DTE) Maharashtra wherein 80% of the Intake Capacity of each branch is facilitated through DTE's Centralised Admission Process (CAP). Remaining 20% of the Intake capacity is filled in through the Institute Level quota, following all the rules and regulations stipulated by DTE, Mumbai for the year. For admission to institute quota advertisement is given in newspapers. Based on applications received merit list is prepared and students are admitted on the basis of merit. Student eligible for government scholarship and free ships are facilitated through the complete online application process.

- 51% of the students are admitted through Minority quota (Kutchhi Jain)

6.2.2 : Implementation of e-governance in areas of operations:

❖ Planning and Development

Academic calendar, Timetable, Student roll call lists, notifications related to students fee, upcoming events and examination are posted well in advance on institute website. Information regarding different student chapters and cell are available on Website .

<https://www.shahandanchor.com/home/academic-calendar/>

❖ Administration

We have Metsmart web portal which lets both staff and students log into it. The staff members can retrieve information about leaves, attendance, leave applications. Staff can enter student attendance also send SMS to concerned students regarding important information.

Biometric attendance system is used for recording in and out timing of staff members.

Institute has a strong surveillance system. CCTVs are installed on all corridors, rooms, Exam section, laboratories, Library. Video footage from CCTVs are constantly monitored in order to avoid any unwanted incidents and to secure the campus.

https://www.shahandanchor.com/metsmartcampus/MET_Modules.aspx

❖ Finance and Accounts

Student Fees, exam fees and all other payments are collected through online payment options.

<https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=654922>

The staff salary is transferred to the bank salary account online and the payslip is forwarded to all by e-mail.

❖ Student Admission and Support

Institute has software which facilitates whole admission process. Registration of student's application forms is done through this software wherein all details pertaining to marks, category, CET score along with personal details are entered. For students admitted through centralised admission process of DTE, admission letter mentioning list of original documents accepted by college is generated. This helps in maintain students record for all four years and thereafter.

Fee receipt is also generated through the software after complete admission process.

For institute level seats and vacant seats advertisement is given in the news paper and received application form are entered and process through softwares. Based on merit list generated by the program students are admitted. This provides transparency in admission process.

Students Identity card is also generated through software.

<https://www.shahandanchor.com/metsmartcampus/default.aspx>

❖ Examination

Students have to fill on-Line Exam forms for the University Level Exams (Semester- 1,2,7&8). College ERP is well built to handle the College Level Exams. Hall tickets are also auto generated by the College ERP. Internal Assessment, Term Work, Oral and Practical marks are uploaded by the respective internal examiners in the College ERP.

Institute's Examination Cell is fully equipped to receive e-Question papers forwarded by University of Mumbai Exam Cell.

❖ Library, ICT and Physical Infrastructure / Instrumentation

- **Library:** College library resources comprises of Reference Books, magazine, journals, compact disc systems & Digital Library facilities. Library has Internet facility centre for student. The institution provides online subscriptions for IEEE, ScienceDirect, ASTM, JGATE, SPRINGER, SCOPUS, Videeya Ebooks & MCGRAW-HILL BOOKS. Syllabus and Previous year University Question Papers. Online Repository of course material. Library is a source of variety of books related to curricular and co-curricular. It also consists of periodicals which are helpful to students for self learning.

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● **Bank**

SAKEC campus has a branch of Canara Bank in its campus especially for SAKEC Staff and students. It is accessible easily and the staff and students of the institution can conveniently complete all their bank transactions.

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
Vidyullata Devmane	Quality Enhancement Measures in Higher, Technical, Professional and Management Educational Institutions with Special focus on NIRF INDIA Rankings-202		10,951/-
Amol Dhumal	STTP on Unleashing the potential of Data Science for engineers(Machine learning and Artificial intelligence)		5000/-
Pradip Mane	NPTEL Course on Python for Data science		600/-
Shashikant Radke	NPTEL Course on Python for Data science		1100/-
Bhakti Sonawane	FDP on High Performance Computing(Application Perspective)		1500/-
Priyanka Abhyankar	FDP on High Performance Computing(Application Perspective)		1500/-
Shweta Patil	NPTEL Course on Applied Natural Language Processing		1100/-
Monika Kanojiya	Artificial intelligence machine and deep learning		2975/-
Deepti Nikumbh	Artificial intelligence machine and deep learning		2975/-
Rupali Kale	Artificial intelligence machine and deep learning		2975/-
Rekha Ramesh	NAAC Peer Team Visit Preparations Criteria Exhibition		1000/-
Uday Bhave	NAAC Peer Team Visit Preparations Criteria Exhibition		1000/-
Uday Bhave	NPTEL Course on Python for Data science		1100/-
Shashikant Radke	IPR Training Program at RGNIPM		13603/-

Shashikant Radke	STTP on Management Information System (MIS)		1000/-
Mr. Uday Bhave	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Vidyullata Devmane	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Pinki Vishwakarma	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Shahzia Sayyad	STTP on Natural Language Processing- Novice to Pro		1500
Mr. Shashikant Radke	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Vaishali Chavan	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Bhakti Sonawane	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Deepshikha Chaturvedi	STTP on Natural Language Processing- Novice to Pro		1500
Mr. Amol Dhumal	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Karuna Borhade	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Tina Maru	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Jaya Fulekar	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Deepti Pawar	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Rupali Kale	STTP on Natural Language Processing- Novice to Pro		1500
Mr. Tejas Hirave	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Monika Kanojiya	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Sarika Puroo	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Deepti Jadhav	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Vaishali Hirlekar	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Krupa Chotai	STTP on Natural Language Processing- Novice to Pro		1500
Mr. Atul Kachare	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Shweta Patil	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Deepa Ekhande	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Rekha More	STTP on Natural Language Processing- Novice to Pro		1500

Ms. Radhika Fulzele	STTP on Natural Language Processing- Novice to Pro		1500
Mr. Pradip Mane	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Priyanka Ghule	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Priyanka Abhyankar	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Dipti Mukadam	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Vaishali Kosamkar	STTP on Natural Language Processing- Novice to Pro		1500
Ms Jyoti Deogirikar	STTP on Natural Language Processing- Novice to Pro		1500
Ms. Priyanka Zirpe	STTP on Natural Language Processing- Novice to Pro		1500
Asha Durafe	Skill Development Public Training Program on Patenting		11319/-
	NPTEL course examination Fee		1100/-
P.G.Khedkar	One day workshop on NAAC preparation		1000/-
Rameshwari Mane	One day workshop on NAAC preparation		1000/-
Jayashree Gajare	STTP On Advanced Communication Technologies and Security Aspects		500/-
Priyanka Singh	STTP On Advanced Communication Technologies and Security Aspects		500/-
Shubhangi Motewar	STTP On Advanced Communication Technologies and Security Aspects		500/-
Manjusha Kulkarni	STTP On Advanced Communication Technologies and Security Aspects		500/-
Babychen Mathew	STTP On Advanced Communication Technologies and Security Aspects		500/-
Rameshwari Mane	STTP On Advanced Communication Technologies and Security Aspects		500/-
Amit Tiwari	STTP On Advanced Communication Technologies and Security Aspects		500/-
N.S. Narkhede	STTP On Advanced Communication Technologies and Security Aspects		500/-
Shikha Srivastava	STTP On Advanced Communication Technologies and Security Aspects		500/-
Vidya Gogate	STTP On Advanced Communication Technologies and Security Aspects		500/-
P.G.Khedkar	STTP On Advanced Communication Technologies and Security Aspects		500/-
Uma Raj	STTP On Advanced Communication Technologies and Security Aspects		500/-
Anita Nalawade	STTP On Advanced Communication Technologies and Security Aspects		500/-

Salabha Jacob	STTP On Advanced Communication Technologies and Security Aspects		500/-
UdayanKamble	STTP On Advanced Communication Technologies and Security Aspects		500/-
Preethi Warriar	STTP On Advanced Communication Technologies and Security Aspects		500/-
Vaishali Hirlekar	STTP On Advanced Communication Technologies and Security Aspects		500/-
Pooja Polshetwar	STTP On Advanced Communication Technologies and Security Aspects		500/-
Amruta Nehte	STTP On Advanced Communication Technologies and Security Aspects		500/-
Akshata Patil	STTP On Advanced Communication Technologies and Security Aspects		500/-
Asha Durafe	STTP On Advanced Communication Technologies and Security Aspects		500/-
Aparajita Bera	STTP On Advanced Communication Technologies and Security Aspects		500/-
Sarika Bukkavar	STTP On Advanced Communication Technologies and Security Aspects		500/-
Manisha Mane	STTP On Advanced Communication Technologies and Security Aspects		500/-
SubhaSubramaniam	STTP On Advanced Communication Technologies and Security Aspects		500/-
Prof.DHANASHREE TORADMALLE	Skill Development Public Training Program on Patenting Rajiv Gandhi National institute of intellectual Property Management, Nagpur		12198
Prof.DHANASHREE TORADMALLE	Workshop on quality enhancement measure for NIRF		10951
Prof.DHANASHREE TORADMALLE	STTP on enterprise network design and infrastructure		3400
Dr. KRANTI GHAG	3 days hands on deep learning course		7080
Dr. KRANTI GHAG	Skill Development Public Training Program on Patenting Rajiv Gandhi National institute of intellectual Property Management, Nagpur		11285
Ms. PRANALI WAGH	STTP on enterprise network design and infrastructure		3400
Ms. SMITA BANSOD	STTP on Block Chain and its Applications		3612.5
Mr. LUKESH KADU	STTP on infrastructure and cyber security		2550
Ms. MANYA GIDWANI	STTP on artificial intelligence, machine learning and deep learning hands on		2975
Mr.MANISHBHEL ANDE	STTP on Management Information System (MIS)		850

Mr. PANJAB MANE	FDP on machine Learning		3500
Mr. HARISH MOTEKAR	STTP on Devops and R programming		2500

6.3.2 Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
2019-2020	STTP on Natural Language Processing – Novice to Pro		01-07-2019 to 06-07-2019	29	
	FDP on Moodle Learning Management	FDP on Moodle Learning Management	25-04-2020 to 30-04-2020	31	1
	A One Day Arduino Workshop for teachers		08-02-2020	21	
	Orientation for IPR and Patenting sem VIII subject		15-01-2020	11	
	FDP on Gamification		16-10-2019	50	
	A One Day eSIM Workshop for Teachers		21-09-2019	46	
	STTP ON Advanced Communication Technologies and Security Aspects		01-07-2019 to 06-07-2019	29	
	Two days Teachers Training hands on Workshop of e-yantra Robotics at IIT Bombay		20-09-2019 to 21-09-2019	1	
	IPR and Patenting Course Orientation		15-01-2020	11	
	-	Training Session for Administration Software	15/06/2019	-	6
-	Training Session for Employee	01/03/2019	-	2	

		Biometric Software			
	-	Training Session for Employee Examination System Software	05/02/2019	-	6
		Intellectual Property Right Mentoring Session for IT Staff	11-02-2020	26	
		Orientation on Natural Language Processing	01/08/2020	56	
		Orientation on Mobile Computing & Communication	11/07/2019	61	
		Orientation on IPR and Patenting	15/01/2020	11	
		Orientation on Instrument System Design	07/11/2019	20	
		Creating Effective Educational Videos	16/2/2019	20	

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
STTP on "Natural Language Processing – Novice to Pro"	29	2/01/2020 to 08/01/2020
Online FDP on Moodle Learning Management system	32	7/05/2020 to 12/05/2020
NPTEL courses on -Ethical Hacking	1	July-Oct 2019
Online STTP on Recent Trends and Applications of ML and DL in IT	1	25/05/2020 - 29/05/2020
Online STTP on LATEX for Everyone	1	18/06/2020 to 20/06/2020
Three Weeks Credit Course on WhatsApp Outcome based Education FDP	4	24/03/2020 to 14/04/2020
National Online FDP on Artificial Intelligence	1	22/05/2020 to 26/05/2020
Online STTP on Signal Analysis, Machine Learning and its applications using Python and Matlab	1	01/06/2020 to 05/06/2020
STTP On Advanced Communication Technologies and security aspects	29	1/7/2019 to 6/7/2019
SPARC course on Audio Signal Processing for computational Musicology	1	2/12/2019 to 6/12/2019

STTP on Emotional Intelligence Using AI, ML & Python	1	1/05/ 2020 to 5/05/ 2020.
NPTEL-AICTE, Faculty development program on Introduction to Internet of Things	2	July 2019 to October 2019
Short Term Training Program on “MATLAB based Teaching-Learning in Mathematics, Science & Engineering”.	2	18/05/2020 to 22/05/ 2020.
IIRS Online Certificate Course On Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials	1	13/06/2020 to 2/07/ 2020
5 days Workshop on Universal Human values conducted by AICTE	2	13/05/2020 to 17/05/ 2020
6-Day Training program on IPR	4	25/11/2019 to 30/11/ 2019
NPTEL Deep learning -1	1	07/2019-11/ 2019
Python for Data Science	1	08/2019 to 09/2019
FDP on learning pedagogy & effective use of case methodology	1	17/05/2020 -21/05/2020
Innovation, IPR, Entrepreneurship, and Start-ups among HEIs	1	28/04/2020 to 22/05/ 2020
STTP on Artificial Intelligence, Machine Learning and Deep Learning : Hands on	1	24/06/2019 to 29/06/2019
STTP on Driving Innovations with DevOps	1	9/12/2019-14/12/2019

6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):

	Teaching		Non-teaching	
	Permanent	Fulltime(ad-hoc)	Permanent	Fulltime/temporary
Total	96	34	12	8

6.3.5 Welfare schemes for

Teaching	<ol style="list-style-type: none"> 1. PF Facility is implemented as per government norms 2. Gratuity is also implemented for the retiring staff members 3. Group Insurance 4. Book Allowance of 1000/- per year
Non-teaching	<ol style="list-style-type: none"> 1. PF Facility is implemented 2. Gratuity is also implemented for the retiring staff members 3. Group insurance is implemented 4. Medical allowance
Students	<ol style="list-style-type: none"> 1. Insurance is facilitated 2. Flexibility of Fees Payment in instalments is extended to needy Students

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)

Shah and Anchor Kutchhi Engineering College does internal and external audit regularly. Internal audit is done in account section wherein cash transactions are verified on daily basis by cashier. Bank statements, cheque issuance records are also verified. Institute prepares financial budget for particular academic year by taking into considerations of all HOD's and heads of various cells which is approved by principal. Auditing of all financial transactions are done by in charges of various chapters such as ISTE, IETE, IEEE, ACM, CSI. Most of the transactions are in non-cash mode like salary of all employees is directly credited to respective bank accounts.

Also student fee is collected by Demand Draft for first year and through NEFT for rest of the years.

External audit is done by Chartered Accountant Mr. Jay Dedhia along with his staff. Income expenditure statements, cash payments, bills, purchase orders all are verified by external auditor. External auditing is done as per norms. Audited statements are considered for approving college fee by Shikshan Shulk Samiti and verified by office of Director of Technical Education(DTE) Maharashtra state. Institute has maintained very good record of depositing staff salary on first day of every month into bank account. SAKEC is proud to say that no audit objection has ever been reported since establishment of institute. Regular monitoring of fund flow helps to maintain the financial health of the college.

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
NA	NA	NA

6.4.2 Total corpus fund generated :

NIL

6.5 Internal Quality Assurance System

6.5.1 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	LIC,ISO, NBA	Yes	ISO
Administrative	Yes	LIC,ISO,NBA	Yes	ISO

6.5.2 Activities and support from the Parent – Teacher Association (at least three)

Parent meetings are conducted bringing parents into the mentoring system as key stakeholders to create an environment for open interaction and reflection not only with the mentee but with his/her parents too.

Through parent teacher meeting one of the parent made us available internship opportunity in National Informatics Centre (NIC) and every year students are selected for internship through proper selection process.

One parent is in every DAB committee and their feedbacks are taken into consideration and accordingly teaching learning process is updated.

6.5.3 Development programmes for support staff (at least three)

SAKEC Library organised a session on Mendeley Reference management tool , which is product of Elsevier on 12th February 2019. Teaching, nonteaching staff members attended this session which will help in organising annotating and citing research paper and also build their research network.

A session on Fire safety and Precautionary measures was conducted for all college staff.

6.5.4 Post Accreditation initiative(s) (mention at least three)

Not Applicable

6.5.5

- a. Submission of Data for AISHE portal : (Yes)
- b. Participation in NIRF : (Yes)
- c. ISO Certification : (Yes)
- d. NBA or any other quality audit : (Yes)

6.5.6 Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from--to-)	Number of participants
2019-20 (Placement Cell) 2019-20 (Placement Cell)	Placement Orientation	16/6/2020	1 Hour	390
	Network Security	16/6/2020	1 Hour	409
	Mock Interview	17/06/2020	1 Hour	430
	Software Engineering	18/6/2020	1 Hour	426
	Resume Writing	19/06/2020	1 Hour	396
	Mock Interview	20/06/2020	1 Hour	385
	Quantitative Training: Session 1	22/06/2020	1 Hour	378
	Cloud Computing	23/06/2020	1 Hour	363
	Quantitative Training: Session 2	23/06/2020	1 Hour	363

	Reinforcement Learning (Deep Q)	24/06/2020	1 Hour	342
	Placement Orientation	16/6/2020	1 Hour	390
	Network Security	16/6/2020	1 Hour	409
	Mock Interview	17/06/2020	1 Hour	430
	Software Engineering	18/6/2020	1 Hour	426
	Introduction to compiler	25/06/2020	1 Hour	343
	Quantitative Aptitude: Tips and Tricks	25/06/2020	1 Hour	343
	Mock Interview	26/06/2020	1 Hour	348
	Panel discussion by TCS campus placed Alumni	27/06/2020	1 Hour	340
	Awareness Session for Gate Examination	29/6/2020	1 Hour	333
	Expectations of IT industry from Fresher's	30/06/2020	1 Hour	342
2019-20 (Spoken tutorial)	National level FDP on Moodle learning Management System	25 th - 30 th April 2020	Flexible	839(All over India)
2019-20 (Research Cell)	A Hybrid Webinar Series: Innovative & Emerging Technology in the field of Research (40 Webinars)	13 days started from 06/06/2020		
	Internship with Art of Living			30 Students
	3 Projects Launched a)Arihant Media Solutions b)Creative Finserve pvt.Ltd c) Skinzy software solutions pvt.Ltd			

	Published 4 books, 4 copyrights, 496 papers	-	-	SAKEC staff members
IPR Cell	Organised 18 trainings	-	-	
	11 Events	-	-	
	Online project competition	13/04/2020	-	124 Students
	Online project poster presentation	15/04/2020	-	67 Students
	Live Webinar on Data Analytics	30/05/2020	3:00p.m-4:00 p.m	134
IETE	Series of webinars on The Magic of Photoshop	29/5/2020-30/5/2020	2:00 p.m-5:00 p.m.	15
ACM	Hands-on Workshop on Python & Django Web Frameworks	13/3/2020-14/3/2020	-	64 Students
	Virtual Triumph	11/4/2020	-	150 students
	Yoga for a healthy living	14/6/2020	-	48 students and staff
Sambodhi	Monthly writing Activities	January to June	-	20 submissions from both staff and students
	All India Essay Writing Event	August and September 2019	-	10
	Felicitation Ceremony for Heartfulness Essay Competition	23/2/2020	-	02
Speakers Club	Technical Debate	31/08/2019	-	13 Teams
	SAKEC QUIZ 2019	09/10/2019	-	9 Teams
	Founder's Day	05/02/2020	-	23
	Elocution	05/10/2019	-	15
Alumni Cell	Guest Lecture on My experience with GRE and how I ended up choosing Germany	31-07-2019		20

	Skill Development Workshop	14-09-2019		
	Annual Alumni Meet SAMPARKA2020	01/02/2020		
	Virtual Run on Global Running Day	03/06/2020		

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
NA	NA	-	-

- **CCTV facility:** The institute has CCTV facility in classrooms, laboratories, library, corridors at each floor for monitoring and security purposes. This facility is being used to monitor if students are obeying laws that were implemented in the college. The real purpose of having CCTV cameras installed in college, is to reduce the situations inside the campus. and to offer the college students better security. The female staff or students feel comfortable and safe. They gain the confidence to move out freely.

- **Female security guard-**The institute is encouraging to appoint female security guards. One female security guard has been appointed on the main gate of college. The role of her is to check ID cards of both Staff and Students daily. She always gives her contribution to protect people and college premises for the safety purpose.

Girls Common Room-The institute has established a spacious and comfortable girl's common room. This space has been designed to give female students a place to relax, study, have informal discussions in free time available. Facilities like Recliner chairs, tables, yoga mate, balls are available in this room

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources

Electric panel is located at Ground floor. The board is changed with a new panel and new switches.

Three-phase tripper is installed. Electric lightning was changed with LED Bulbs for less consumption of power and reduction in billing cost from 2017. Power factor is Unity from May-2017. Energy saving is additionally ensured by students and staff by switching off the lights and fans when not in use.

1. Final year students of Electronics Engineering have completed Project on “Energy Conservation and saving using non-conventional energy source” and published paper on International Research Journal of Engineering and Technology (IRJET).

2. Staff of Electronics Engineering, Ms. Manisha Mane has created a video on Environment and Sustainability after completion of FDP.

Waste Management:

Institute is conscious about the environmental issues arising from improper waste handling and takes responsibility to ensure that waste from the campus is properly disposed of and/or recycled. The institution has taken up several measures for waste management to safeguard the environment.

1. Solid waste management: College believes in inculcating cleanliness and environmental consciousness values among students. Thus, dustbins are kept at all the major places in college campus for collecting solid waste. Solid waste is segregated at the source; organic waste is collected in green dustbins and non-biodegradable (Dry) waste in blue dustbins. The waste pickup and collection is done by housekeeping staff. College canteen is making an effort for collecting the waste. In the canteen there are separate dust bins for collection of solid waste. Dry waste and all the canteen organic waste and gardening waste is collected by the municipality staff. No waste is burnt in the college campus, all the waste is collected by the municipality for proper disposal. No hazardous waste is produced in the college campus. Major solid waste produced in campus is in the form of papers. College has a shredding machine in the exam cell as well as in the administrative office which takes care of it. Also, major paper waste generated in the institute is provided to different agencies for its reuse. Moreover, to save the papers, printing is carried out only when essentially

needed. Major study material (assignments and notes) is provided to students via mail and/or WhatsApp in the form of softcopy. To avoid the waste generation in campus, awareness is created among the students and staff and to sensitize them about environmental issues.

2. Liquid waste management: The institute is located in Mumbai area and all its liquid waste is managed by the Bombay Municipal Corporation. The liquid waste is sent to the sewage treatment plant of the municipality where it is processed.

3. E-waste management: If any electronic instrument and/or computer are not in working condition, then it is checked by laboratory assistants and external technicians for minor and major repairs respectively. If it is not repairable then each department prepares the scrap equipment list after the approval from the technician. Technicians check if some parts are useful in other systems, then they are kept aside for future use. All the old non-working electronic goods are given away for recycling and new electronic appliances which adhere to the environment protection rules and power consumption norms are purchased at regular intervals. Electronic waste is minimized by reusing the electronic components and regular maintenance.

7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	YES	NA
Provision for lift	YES	NA
Ramp/ Rails	YES	NA
Braille Software/facilities	NO	NA
Rest Rooms	YES	NA
Scribes for examination	YES	NA
Special skill development for differently abled students	NO	NA

Any other similar facility

NO

NA

7.1.4 Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2019 - 2020	1	1	11/07/2019	Orientation Program on Instrumentation System Design (ISD)- ELX701	SAKEC
			26th January 2020 8:00am to 12:00 Noon	Beach clean-up drive at Charni Road Beach by collecting waste from the beach.	Cleaning of beach and promote Swatch Bharat Abhiyan
		1	17th July 2019. 03:00 p.m. to 05:00 p.m.	Institutional Training Program for Educational Institutes on Energy Conservation organised by Petroleum Conservation	Environmental Pollution, Conservation of Energy and Green Energy

				Research Association		
			1	31st August 2019	Gaushaala CSR Activity	to showcase the students the importance of cows in our natural ecosystem and importance they have on our lives
			1	2nd of Feb 2020	Art of Living Watershed Project Launch	Conservation of water throughout Maharashtra
			1	17th September 2019.	MoU signed by SAKEC with Art of Living (International Association of Human Values), provided an opportunity to 140 interns and 9 mentors to address the live challenges in Water Conservation	To address the live challenges in water conservation mapping and software development projects

		1	4th October ,2019	SAKEC and Vigilance Cell of Rashtriya Chemical and Fertilizer Ltd. (RCF) had organised an intra-collegiate Elocution Competition	To help spread awareness regarding moral societal values and ethics.
		1	31st August, 2019	Inter-Collegiate Technical Debate for students from various Technical backgrounds (such as B.Sc IT, B.Sc CS, BE, ME, Polytechnic, etc)	Provide students a platform to socialize and overcome their fear of public speaking

7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
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Appointment letters given to staff members	Since the inception of college and are updated periodically.	At the time of joining the college, appointment letters are given to all the faculty members. The appointment letter contains in brief conduct and discipline rules.
Library code of conduct	Since the inception of college	Library follow a strict rule for staff and students which are displayed on college website
IT & Internet usage Policy	Since the inception of college and are updated periodically.	Rules to use the internet and sites which are not authorized are not allowed through college wi-fi. Rules need to be followed by everybody who uses internet i.e staff, students, admin staff, Technical Staff.

7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from---to--)	Number of participants
Institutional Training Program (ITP) By PCRA by ACM	17/07/2019	150
Gaushala CSR activity	31/08/2019	
Beach Clean-up Drive	26/1/2020	19
BE-IT project on smart public toilet management	2019-20	3
BE-Comp project on waste management and alert system	2019-20	3
Universal human values	09/10/2019 and 11/10/2019	56
Vacchan prerna diwas	15/10/2019	-
Promoting Art of living through project launch	2/02/2020	140

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. **Plastic free campus:** Colleges strongly says no to plastic. Thus, dustbins are kept in all major places in college. College canteen consciously takes effort to reduce the use of plastic while serving food. Green practices are inculcated among students through providing swachh bharaat summer internship programs. Further an effort towards plastic free campus, college gives saplings as gifts or prizes to students and to reduce the use of plastic water bottles college have made provision of filter water dispensers on every floor.
2. **Green garden:** College maintains a green landscape garden to inculcate environment awareness among students.
3. **Paperless communications:** Paperless communications are practiced within and outside the department through mailing and messaging. Google classrooms are used for taking quizzes, sharing notes and ppts with students. Google drive is mainly used for departmental work.
4. **Public Transport:** Since college is located in the heart of the city, all the major public transport like trains and busses are easily available. Most of the faculties and students prefer to travel using public transport.
5. **E-waste management:** If any instrument and computer are not in working condition then it is checked for repairing. If it is not repairable then each department prepares the scrap equipment after the approval from the technician. Technicians check if some parts are useful in other systems, then they are kept aside for future use.
6. Instructions and awareness are created among students and staff for the proper use of water. Maintenance of taps in various washrooms is done to avoid wastage of water.
7. Waste generated from college canteen is separated.

7.2 Best Practices

1. To enable students and staff to communicate with local society through various events.
2. To understand the growth and development of marginalized communities.
3. To shape responsible and supportable professionals for the community.

3. The Context

Along with the adaptation of a good teaching learning process, college is organizing various social activities to enhance the social responsibilities among students and staff. Students are motivated to contribute to various local community. College realizes that community service is one of the essential elements of true

education. The objective of the Institute is to develop student's professionals with social work values and ethics.

4. The Practice

Institute has organized following events:

a) Exposure Visit to School Problem Identification:

IIC SAKEC 2.0 conducted event Exposure to school –Problem Identification on 18th Sep 2019. Around 45 Students attended the visit to Bhavana Trust's Shri L.V. A. Sarvodaya Vidyalaya, Chembur. The task was to identify the problems faced by the school students. Students interacted with the students and observed the problems faced by students in their day to day school life.

b) Visit of school children to Innovation facilities in the institute:

SAKEC IIC 2.0 had organized a visit of school students to the innovation facilities available in the Institute on 15th October 2019 as a part of Innovation Day Campaign. The students of Bhavana Trust's L. V. A. Sarvodaya Vidyalaya, Chembur, Mumbai. Total 40 school students participated in it. In order to make the activity more fruitful and enjoyable, 10 students from 5th, 6th, 7th and 8th standard were chosen. These students visited the innovation laboratory in the Institute where they were introduced to the 3D idea generation software.

c) 15th August Social Drive at Swastik Park:

IEEE SAKEC student branch, on Independence Day conducted a social drive where they distributed food to the underprivileged students in Chembur. The volunteers celebrated Independence Day along with the kids over there and conducted many interactive activities for them as well.

d) Gaushala CSR activity:

ACM SAKEC conducted this activity to showcase the students the importance of cows in the natural ecosystem and our lives.

e) Beach Clean-up Drive:

SAKEC ACM Student Chapter along with “Change Is Us” organized a beach clean-up drive. The event was conducted on 26th January 2020 on the auspicious 71st Republic Day of our country. The event was conducted in the morning from 08:00 am to 10:00 am at Charni road Beach by collecting waste from the beach.

5. Evidence of Success

The evidence of success of CSR activities is reflected through the overall development of the students towards the local community and as a responsible citizen. Students and staff are involved in various real-life projects in collaboration with different NGOs.

6. Problems Encountered and Resources Required

To mould the students' mentality towards improvement in their personality without hampering academics was a difficult task.

Best Practice II: 1. Title of the Practice: MOUs with different NGOs.

2. Goal:

1. To provide Social, Educational and Economic Empowerment to society.
2. To facilitate and support skill development initiative in the society and corporate.

3. To conduct study on various social issues time to time, gather data, and carry out research.

4. To inculcate the habit of contributing to society in students.

3. The Context

Institute has signed MOUs with some NGOs. Students, faculty mentors and student mentors are working on different projects with NGOs.

4. The Practice

Institute has collaboration with NGOs like Indian development foundation (IDF), Roti Bank Mumbai, Bombay Leprosy Project, Art of Living International Association for human values (IAHV), Live Your Dream Foundation (Happy Bubbles), Waggy Tails Private Limited. Students are involved in various real life projects in collaboration with above mentioned NGOs.

The Water Conservation Mapping project is in association with IAHV. This project helps rural population in Maharashtra who are suffering from water shortage. Students are generating satellite maps for all tehsils in Maharashtra. Developing project management software. Developing crowdfunding app for water conservation activities. Students started work on 17th July 2019. Eighty pulse students, 8 faculty mentors and 4 students mentors are working on the project. 150 plus Tehsil boundary maps completed. 50 plus tehsil water stream mapping using google earth in progress. Completed satellite mapping of 50 plus tehsil for commencement of work in October 2019.

Let it Wag is an app that connects all the Stakeholders in the Animal Industry to save Animals in real-time. In other words it's a technology enabled animal rescue app. Students with faculty mentors completed the project at Waggy Tails Private Limited for the app Let it Wag on 26th December 2019.

Electronic Health Record Management System project with Bombay Leprosy Project ,Speed Ambulance with Indian Development Foundation, Zero Hunger project with Roti Bank Mumbai, Web of Hope with Indian Development Foundation, SLP project with Indian Development Foundation, Test before Taste with Roti Bank Mumbai all these projects are implemented by students and faculty mentors in the academic year 2019-20.

5. Evidence of Success :

Along with faculty mentors students have identified the problem statements and completed the project successfully.

6. Problems Encountered and Resources Required:

Problem is not encountered.

Refer Website-Link: https://shahandanchor.com/research/index.php/Ctrl_projects?projects=19

7.3 Institutional Distinctiveness

The 21st Century Engineer's with broad Skill Set: Engineer's today remain strong in terms of their technological skills, core knowledge and practice, but they generally lack ICT skills and impersonal and professional competencies. Institute, in line with its vision and mission, attempts to produce engineering

graduates with this broad skill set so they become ready for future job's. Following are the professional bodies and events and activities conducted by them in the academic year 2019-20.

1. **Institute Innovation Council (IIC2.0):** SAKEC-IIC 2.0 vision is to systematically foster the culture of Innovation in Institution. IIC 2.0 has successfully completed 64 events related to problem identification, innovator's life, design thinking, product development phases, academic patenting, universal human values, innovation & startup national policy and also promoted leadership talks broadcasted on Dr. Abhay Jere's Twitter handle and 15 e-sessions series organized by MHRD's innovation cell

2. **E-cell(entrepreneurship cell):** E-cell is established to promote strong entrepreneurial culture among students . Following are events, workshops, competitions organized by E-cell to introduce and improve innovative thinking among students.

- Working with Geodesics
- Beach Clogging drive
- Workshop on innovation
- Workshop on Technical Paper writing.
- Food Fiesta.
- Shark Tank.

3. **Sambodhi and Speaker's Club:** Institute's sambodhi and speaker's club are great initiatives which help students to develop good oral and written communication skills, improve public speaking, listening and presenting skills. Following are the activities done by Sambodhi and speakers's club:

- Heartfulness Essay writing Competition by Shri Ram Chandra Mission where 1st and 2nd prize were taken by SAKEC students.
- Monthly writing Activities.
- Essay Competition on innovation.
- Technical Debate
- Elocution Competition.
- Inter-Collegiate Quiz.
- Inter-Collegiate word play games.

4. **SAKEC Global Immersion:** SAKEC Global Immersion 2019-20: Europe was a great opportunity for students to develop global awareness, intercultural competencies which are needed to perform well in the global workplace.

5. **International/National level competitions:** Institute constantly encourages students to participate in national and international level competitions ,since these competitions are a great way to develop teamwork ,collaboration ,and leadership skills.

- For Smart India Hackathon total 4 groups were selected for the grand finale.
- Avishkar Research Convention 2019-2020 district selection round, 14 research project groups were registered from the institute at UG level.
- For Deep Blue hackathon 6 groups participated and were working on problem statements given by Mastek.

6. **Research cell:** Research Skills helps the students to adapt and evolve to ever changing workspaces. Research cell at SAKEC encourages students to undertake multi-disciplinary research. It provides internships to students where they work on live projects which mainly focusing on pressing problems of the society. It further encourages students for paper publications, undertake certification courses, and apply for copyrights and patents. Following are some notable achievements of the research cell in the academic year 2019-20.

- 15 research publications by the students.
- 29 projects with 256 interns.
- Till date 27 MoU's and 10 international MoU's.
- SAKEC International Webinar series 1.0.

7. Self-directed learning is lifelong learning. It helps students to quickly learn and adapt to new technologies. Institute has come up with various initiatives to inculcate an attitude of self-directed learning in students.

- Coursera for campus.
- Series of webinar on The Magic of Photoshop by SAKEC-IETE.

8. Future Plans of action for next academic year (500 words)

- Encouraging the faculty and students for registering their IP by Establishment of IPR Cell.
- Motivating and encouraging the staff to adopt new teaching learning methods.
- Encouraging staff members to pursue PhD
- Increasing number of MoUs
- Motivating students to pursue internships and working on more funded projects.
- Conducting more number of CSR activities.
- Encouraging students and staff for developing their writing skills.
- Encouraging students for more entrepreneurship activities.

Dr. Nilakshi Jain
Coordinator, IQAC

Dr. Bhavesh Patel
Chairperson, IQAC

Annexure I

Abbreviations:

CAS	-	Career Advancement Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
