

FOR 1st CYCLE OF ACCREDITATION

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

SHOBHAVANA CAMPUS, MIJAR - 574225, MOODBIDRI, DAKSHINA KANNADA DISTRICT, KARNATAKA 574225 www.aiet.org.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Alva's Institute of Engineering and Technology (AIET) stemmed out of Alva's Education Foundation (AEF)®, an entrepreneurial vision of Dr. M Mohan Alva, an Ayurvedic doctor, an Educationalist and a social reformer in Moodbidri, Karnataka. AIET is strategically located adjacent to Solapur-Mangalore highway in a lush green campus of 30 acres out of 144 acres of Herbal Garden of Shobhavana campus in Mijar, Mangalore. The institute was established in 2008 under AEF, to provide affordable quality professional education to the youth of various socio-economic backgrounds. Institute is a self-financed institute affiliated to Visvesvaraya Technological University (VTU), Belagavi.

AIET offers 8 UG programmes in Engineering, PG in Business Administration. Further, institute also offers 6 PhD programmes in Engineering and Basic Sciences. Institute adheres to the VTU curriculum and caters course content to students using ICT enabled classrooms, seminar halls and auditorium comprising of Audio-visual facilities with Wi-Fi enabled campus. Institute has well-furnished hostels for Boys and Girls, well-networked transportation facilities for students and staffs, excellent facility for sports and cultural activities, a dedicated health centre, gymnasium etc. Institute caters participative, experiential and content beyond syllabus learning through value added and R& D labs viz., Linux lab, Apple iOS lab, Envision-lab, Innovation & We lab, E-Yantra Robotics labs, IC Engine lab, CATIA Modelling lab, MEMS lab, Composites lab, Nano Organic Electronics and Earth's Field NMR (NOEL-EFNMR) lab and Alva's Centre for Advanced Research (ACAR) lab. Institute has various collaborations, MoUs with Institutes and Industries viz., IIIT-Allahabad, IISc, Kumamoto University (Japan), Toyota-Kirloskar Motors, NARL, NRSC, RRSC, ISRO, NAL, BEL, HAL, NHAI to ensure quality participative and experiential learning. MoU with Beta CAE India PVT limited, Bangalore has facilitated 2.1 crore worth software tool for Mechanical and Agricultural Engineering domain. The CSE and ECE Departments have been accredited by NBA. AIET has obtained funding for research from various Government organizations (DST, VGST, KSCST). AIET has been ranked 147 throughout the nation by Times Engineering Institutes Ranking Survey 2021. For holistic development of individual, institute provides training in sports & cultural events and encourages students to excel in University, state and national level.

Vision

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

Mission

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

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Institutional Strength

- Reciprocation and endorsement of the proposals of the institute by the responsive management has led to up-gradation of infrastructure and other facilities, thereby contributing for growth of institute.
- Alva's Institute of Engineering and Technology, Moodbidri, is a renowned for its diversified culture, uncompromised attitude towards quality in teaching and learning which has led to transformative education.
- The institute has adequate infrastructural requirements viz., ICT facilities, e-learning, Library, Auditorium, Curriculum labs, Seminar halls for teaching learning process.
- The institute has value-added labs which are accessible to students beyond college hours to enrich their *content beyond syllabus* knowledge, experiential and participative learning in Science and Technology.
- As most of the students are hostel residents, college resources can be optimally utilized. Further training activities can be planned beyond college working hours and even on holidays.
- The institution has research centres (VTU approved), & Entrepreneurship Development Cell. In association with the Karnataka Council for Technological up-gradation (KCTU), Vision Group on Science and Technology (VGST), Government of Karnataka, AEF, and industrialists the institution makes all positive efforts to nurture innovation ecosystems and to cultivate research environment.
- The institute has well-equipped infrastructure, and training facilities supported by trainers that have created good learning environment to the students and ensured students to excel in Visvesvaraya Technological University (VTU) level Cultural and Sports events. The institute has bagged overall championship at VTU Youth Fest from past few years and have been champions in University, Inter-University, and Zonal to National level. The flagship team of the institute "SINGARI MELA" & "DOLLU" has bagged several recognitions across the country.
- Institute hosts Alva's PRAGATI *Mega Open Placement drive*, a one-of-a-kind cause driven placement initiative in the state every year. Alva's PRAGATI is committed to the cause of reducing unemployment problem that has affected the rural youth of this region. The program is recognized by the Government of Karnataka and AIET is designated to organize mega placement drives in different district centres (Chikkaballapura, Mangalore and Belthangady).

Institutional Weakness

- Constraints in restructuring curriculum, as the institute is affiliated to University (VTU).
- Research grants for private affiliated institutes are limited due to policy of funding agencies.
- Attracting urban area students is tough due to rural location of the Institute.
- Reluctance of recruiting agencies to reach the institute due to rural proximity.
- Absence of industries viz., Manufacturing, Infrastructural, Electronics and Electrical in the region has led to declination of recruitment in core engineering branches and thereby admission for the same.

Institutional Opportunity

- Institute has several MoU/Academic Collaborations with premier Institutes and Organizations viz., ISRO, NARL, RRSC, IIIT-Allahabad, Toyota-Kirloskar Motors etc., there is a wide scope for Industry-Academia gap bridging process through Internships and Industrial visits.
- Being located in rural region, there are more opportunities to interact with local farmers on addressing issues using the available technology.
- Scope for Consultancy services in Public and Private sectors.

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• Boom in the IT sector in recent times has created good opportunities for IT based placement opportunities.

Institutional Challenge

- As students admitted to institute are from various rural, socio-economic, geographical, linguistic and different strata of society, it is challenging to plan and streamline the teaching-learning process.
- Increasing the employability opportunities is challenging due to downtrend in infrastructure and manufacturing sectors compounded by economic recession caused by pandemic.
- Faculty retention and attraction due to the geographical location of the institute is difficult.
- Recent introduction of new IT branches nationwide has created exigency of quality faculty in the domain, hence retaining and attracting faculty in the institute is a challenge.
- Due to recent pandemic situation, there is a reluctance in students to get admitted to the institute from other states.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Alva's Institute of Engineering and Technology, Moodbidri affiliated to Visvesvaraya Technological University (VTU), Belagavi adheres to the curricular aspects designed by the same. The Curriculum aspects rendered by the university is thoroughly analysed by IQAC. The suggestions from the IQAC members are communicated to the University for further improvement of the curriculum. The institute believes in excellence in academics and hence bridges the gaps in the curricular aspects by connecting content beyond syllabus through initiatives viz., values added labs, institute emphasized internship programs (45 days, apart from 15 days of university prescribed internship duration), Technical talks, Industrial visits, MoUs, Academic collaborations, Projects (Mini, Micro & Project) and various certification programs. IQAC of the institute ensures that the content delivery plan and execution through various ICT enabled tools are performed in due course adhering to institute's Calendar of Events (CoE). The institute incorporates the outcome-based education (OBE) system to strengthen the quality of curriculum delivery for incremental growth of the same. The institute prepares the students for socio centric activities by integrating the crosscutting issues such as Gender Sensitization, Environment Sustainability and Human Values & Professional Ethics through clubs/ Cells/Committees viz., Women empowerment cell, Srishti (Nature club), Chirrp (Bird watching club), Rostrum (Speaker's club), Professional Holistic Competence Foundation Course (PHCFC) and other initiative in NCC and NSS units. The institute implements the corrective measure in every aspect of curriculum delivery through the stakeholder's feedback to excel in academic programs.

Teaching-learning and Evaluation

Institute ensures that the teaching-learning strategies are efficiently implemented based on the learning abilities of the students. Often, the learning of a student is affected by different backgrounds viz., socio-economic, learning methods adopted in preceding school and peer group influences. Furthermore, influence of mother tongue and the rural-urban divide also play spoil sport. In this regard, Institute makes efforts to evaluate the mixed abilities of the students and to establish a symbiotic bond between the teacher and the student to improve learning. The institute's faculty spectrum ranges from national to international level of teaching-learning

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exposure which gives the institute an upper hand in creating a conducive academic environment. The performance of slow learners is enhanced through remedial, one-one interaction, and other learner's triangle (Teacher-Student-Parent) initiatives. The advanced learners are encouraged to involve into experiential learning supported by ICT enabled tools, Value-added labs, technical clubs, short-term research activities and other elearning courses. Further, Mentor-mentee program of the institute strengthens the bonding between teacher and the taught through addressing the issues faced by the students in the academia. The OBE system ensures quality of teaching-learning practices through periodic review, identifying the gaps and compensating with corrective measures as suggested by IQAC. Based on the reviews, feedbacks from students and other stakeholders of the institute quality initiatives viz., Faculty development program (FDP), Students Development/Training Programs (SD/TPs). All the above initiatives in teaching-learning process strives towards excellence in academia thereby sufficing the vision of the institute.

Research, Innovations and Extension

The Institute is committed to provide an excellent research eco system as per the Mission of the Institution. The institution has 07 functional Research centre (VTU approved), & Entrepreneurship Development Cell and the value-added labs to strengthen the dimension of research, innovation and extension programs. In association with the Karnataka Council for Technological Upgradation (KCTU), Vision Group on Science and Technology (VGST), Government of Karnataka, AEF, and industrialists the institution makes all positive efforts to nurture innovation ecosystems and to cultivate research environment. Institution has a practice to sponsor faculty members for their higher studies (M.Tech., PhD & Post doc). The above research ecosystem through institute's initiatives has facilitated aspiring research scholars to publish scientific results of their research in journals of national and international repute. As per the vision statement, the institute also foresee that the student nurture their entrepreneurial-skills. In this regard the institute established EDC in 2016, aiming for the overall development of the student fraternity. An active MoU with EDII, Ahmedabad has extended knowledge support, financial grant for conducting Entrepreneur Awareness Camp & FDP. The dedicated effort of EDC has resulted in creating awareness and government support system to Entrepreneurs. A total of 05 students of our institute have emerged as a distinguished entrepreneur viz., Interior designing company, Automobile maintenance centre, Supply chain and management of domestic needs and etc. The institute is known for its social commitment, contribution to the culture and societal growth by nurturing the spirit of sportsmanship and camaraderie which reflects in its vision statement. Accordingly, students are prepared in inculcating empathy and social commitment through extension activities conducted by NCC, NSS, Red cross and Departmental forums viz., Beach cleaning, Neighbourhood cleaning (Swachh Mijar), Blood donation, Toilet construction at public schools, Charity events for needy. These initiatives metamorphose students into responsible, responsive and sensitized citizens.

Infrastructure and Learning Resources

The institute has adequate infrastructure and physical facilities viz., classrooms, laboratories, computing equipment, as per the norms of AICTE and VTU for teaching learning process. Institution has 45 class rooms with an adequate infrastructure viz. Green/Black Board, Projectors, CPU, Wi-Fi/ LAN, Seating arrangements. There are Curriculum labs considering VTU Syllabus and AICTE norms, 11 Value-added laboratory facilities to meet the needs of industries by focussing on the content beyond syllabus. Institute is having one Auditorium with seating capacity of approximately 900 persons and 7 seminar halls spread over the campus to fulfill curricular and co-curricular activities of the individual department. There is well-established Training and Placement cell. The institute facilitates more than 900 computers for the usage of students and staff in

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classrooms, laboratory, library and office. The institute's library occupies a total area of about 1540 sq.m with seating capacity of 300 users. Over 24000 volumes and 47 journals are available for students and staff. Library is automated with the RFID system, barcode reader and automated circulation facility with Online Public Access Catalogue. The Digital library is equipped with 11 PCs with Printer and Scanner to access e-resources. The library provides Mobile App and remote access facilities for self-learning of students/ faculties beyond institution hours. The institute has BSNL 1:1 leased line internet with 1000 Mbps bandwidth. Also, there is a backup internet facility of 50 Mbps 1:1 Airtel leased line powered by DeeNet. The campus is Wi-Fi enabled to students and faculties to ease the process of e-learning. The EDC of the institute conducts programs to create entrepreneurship awareness among students to develop as entrepreneurs. There are computing facility with 20 PC with all-in-one printer, LCD projector and Wi-Fi facility. A dedicated hostel facility for boys and girls are in the backyard of the institute. Entire Institute is covered under the surveillance of 314 CCTV camera facility for the safety of students and for the VTU examination purpose. To maintain uninterrupted power supply, generators of capacity 365 KVA and 320 KVA have been installed and are maintained by in house electricians.

Student Support and Progression

The institute has a robust student support system to ensure favourable academic environment for any student individual. An exclusive student scholarship section notifies the applicants and facilitates student in timely processing of regional and national scholarship schemes. Further to this the institute supports students stemming from various socio-economic backgrounds through Institutional Scholarships (CHATHRAVRITTI) and freeship. The institution has a strong mentor-mentee program (MARGADARSHI) for supporting the Learner's Triangle (Student-Teacher-Parent) system, thereby creating well defined student support system. Further the professional counsellors handle the unforeseen academic challenges faced by the students through the program (BELAKU) of the institute. Institution has a well-structured training program comprising of Softskills, Interpersonal skill development, ICT skills and Technical specific through Training and Assessment partners. The T& P cell conducts various sessions on Entrepreneurship, Career Guidance and further motivate to take up competitive exams. The strategy of such training system has fruition into multi-folding placement record. The institute's research ecosystem, R& D labs, Value-added labs and other experiential learning modes facilitate aspirants to pursue higher education. The Institute has left no stones unturned in the domain of Cultural and Sports through effective training to students by professionals. This has yielded several accolades in the field of Sports and Cultural right from University, Inter-University, Zonal to National level. The institute have been overall champions in Visvesvaraya Technological University Sports and Cultural fest for multiple years. The institute has functioning Anti-Ragging, Prevention of sexual harassment cell, Grievance redressal cell to redress issues faced by students in timely fashion.

Alumni play pivotal role in forming the institute's strategic perspective plan through their feedback and also provides support in conduction of various technical activities. This has strengthened the bond between alumni and institute by forming Alumni association.

Governance, Leadership and Management

The Institute has efficacious Governing Council (GC), headed by Chairman of Alva's Education Foundation (AEF), Moodbidri and the Principal of the institute as the Member Secretary of the GC. In addition to this, GC comprises eminent personalities from the society, Academicians, Faculty representatives, State government & University representatives. Along with the GC, administrative activities are supported by Finance and Purchase committees for the smooth conduction of all the academic and financial activities. Timely conduction of

academic and financial audit (internal and external) has lent a supportive hand to the governance of the institute. The Principal chairs the Internal Quality Assurance Cell (IQAC) and assisted by its members (Deans, Head of the Departments), Administrative Officers, external experts and Conveners of various Institute Level Committees. Various Committees direct the day-to-day functioning of the Institute. These committees include Admission section; Examination committee, Research & Development, Entrepreneurship Development Cell and Training and Placement Cell which work and showcases decentralized leadership. Heads of Departments/ Committees/ Cells prepare plan in line with the vision & mission of the institute as per the direction of IQAC. This would bring transparency to the governance and inherently encourages participative management thereby aligning to the vision & mission of the institute. In this manner participative management and decentralized leadership, being core belief of the institute, is sufficed through the well-structured governance. Institution always believes that innovation & creativity is an outcome that depends on satisfaction and wellness of its employees. In this regard, The Institute is always committed in initiating welfare measures to its employees in terms of responsibility allowance, leaves, Fee concession for AEF employee's children, sponsorship for higher studies and research incentives. The Institute has developed robust performance management system through appraisals specifically designed for teaching & non-teaching staff considering academic and non-academic performances. The appraisal system consists of evaluation of faculties based on their contribution to the development of department, research & innovation and other institutional events. Further to this student feedback is considered as other dimension for the appraisal system. IQAC chairman forwards the appraisal review report to Governing Council for approval of action plan.

Institutional Values and Best Practices

Institute has created a conducive environment for nurturing values of tolerance and harmony towards various culture, region, language and diverse communities. The institute conducts programs viz., Alva's VIRASATflagship cultural integration event, Alva's NUDISIRI - flagship regional literary festival, Traditional Day -Event portraying unity in cultural diversity and events conducted by forums viz., Tulu Sangha and Kannada Sangha to promote local language (Tulu) and regional language (Kannada) and their culture. These events act like catalyst to enhance interpersonal skills, tolerance, social responsibility and essence of cultural and regional diversity thereby attributing for holistic development of students. Further, institute regularly celebrates Deepavali, Ifthar, and Christmas illustrating the amicable environment towards various religions, thereby accounting for harmony in communal diversity. The activities viz., Blood donation, Tree plantation, Environment cleanliness program etc., conducted by NSS foster the same. Institute celebrates national festivals viz., Independence Day, Republic Day under the Alva's Education Foundation (AEF), wherein over 18,000 students from 19 different institutes under the foundation participate and showcase their national integrity. Army, Navy and Air Force wings of NCC take lead in organizing the parade, with the highest level of proficiency. Institute aspires to achieve the students' overall development through social volunteerism and Awareness programs connecting to local society through "AIET Social Outreach Program - Societal connecting activities of the institute." Institute hosts Alva's PRAGATI - Mega Open Placement drive, a one-ofa-kind cause driven placement initiative in the state, organized under the banner of Alva's Education Foundation (AEF). Alva's PRAGATI is committed to the cause of reducing unemployment problem that has affected the rural youth of this region and other parts of country.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College		
Name	ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY	
Address	Shobhavana Campus, Mijar - 574225, Moodbidri, Dakshina Kannada District, Karnataka	
City	Moodbidri	
State	Karnataka	
Pin	574225	
Website	www.aiet.org.in	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Peter Fernandes	08258-262725	9845050268	08258-26272 6	principalaiet08@g mail.com
IQAC / CIQA coordinator	Dattathreya	08258-262724	9481582906	08258-26272 6	dattathreya@aiet.o rg.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	29-06-2008

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

State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	08-03-2020	<u>View Document</u>
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Validity in months	Remarks	
AICTE	<u>View Document</u>	02-07-2021	12	

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

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Shobhavana Campus, Mijar - 574225, Moodbidri, Dakshina Kannada District, Karnataka	Rural	13.08	63520

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)									
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted			
UG	BE,Compute r Science And Engineering	48	PUC SCIENCE	English	180	180			
UG	BE,Electroni cs And Com munication Engineering	48	PUC SCIENCE	English	120	115			
UG	BE,Informati on Science And Engineering	48	PUC SCIENCE	English	60	60			
UG	BE,Mechani cal Engineering	48	PUC SCIENCE	English	90	15			
UG	BE,Civil Engineering	48	PUC SCIENCE	English	90	14			
UG	BE,Artificial Intelligence And Machine Learning	48	PUC SCIENCE	English	60	60			
UG	BE,Compute r Science And Design	48	PUC SCIENCE	English	60	60			
UG	BE,Agricultu	48	PUC	English	60	36			

	re Engineering		SCIENCE			
PG	MBA,Busine ss Management	24	DEGREE	English	120	120
Doctoral (Ph.D)	PhD or DPhi 1,Computer Science And Engineering	48	MASTER DEGREE	English	2	2
Doctoral (Ph.D)	PhD or DPhi 1,Electronics And Commu nication Engineering	48	MASTER DEGREE	English	2	2
Doctoral (Ph.D)	PhD or DPhi 1,Mechanical Engineering	48	MASTER DEGREE	English	1	1
Doctoral (Ph.D)	PhD or DPhil,Physic s	48	MASTER DEGREE	English	1	1
Doctoral (Ph.D)	PhD or DPhi 1,Chemistry	48	MASTER DEGREE	English	1	1
Doctoral (Ph.D)	PhD or DPhi 1,Mathematic s	48	MASTER DEGREE	English	1	1

Position Details of Faculty & Staff in the College

				Te	aching	g Facult	y					
	Profe	essor			Asso	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				15				25				71
Recruited	14	1	0	15	23	2	0	25	45	26	0	71
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				15				25	J			71
Recruited	14	1	0	15	23	2	0	25	45	26	0	71
Yet to Recruit				0				0				0

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	7			28
Recruited	1	27	0	28
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				28
Recruited	1	27	0	28
Yet to Recruit				0

		Technical St	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				80
Recruited	43	37	0	80
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				80
Recruited	43	37	0	80
Yet to Recruit				0

Qualification Details of the Teaching Staff

]	Perman	ent Teach	iers				
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD	0	0	0	0	0	0	0	0	0	0
Ph.D.	10	1	0	5	1	0	3	1	0	21
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	2	0	0	11	0	0	51	26	0	90

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

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

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	18	36	0	54		

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	349	23	0	0	372
	Female	181	3	0	0	184
	Others	0	0	0	0	0
PG	Male	48	2	0	0	50
	Female	67	3	0	0	70
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	3	2	0	0	5
	Female	3	0	0	0	3
	Others	0	0	0	0	0

Provide	the Following Details of Students admitted to the College During the last four Academic
Years	

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	9	9	6	21
	Female	3	8	6	7
	Others	0	0	0	0
ST	Male	6	4	1	6
	Female	2	3	2	2
	Others	0	0	0	0
OBC	Male	51	48	45	62
	Female	40	38	41	24
	Others	0	0	0	0
General	Male	241	191	155	265
	Female	128	124	103	171
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		480	425	359	558

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

AIET is affiliated to Visvesvaraya Technological University (VTU) and is bound to follow curriculum set by the same. The VTU has already introduced multidisciplinary open-elective system and students are offered Interdisciplinary subjects with three credits. The institution has limitation in offering flexible and innovative curricula. To compensate this, institution has established value-added labs, where students involve in interdisciplinary-research/innovative projects. Students are encouraged to participate in certification courses, workshops, technical talks etc. which are multidisciplinary in nature. In order to incorporate social engineering graduate attributes, VTU has taken initiation to

	introduce Universal Human Value (UHV) subject to students as per AICTE model curriculum. Further few of the faculties have successfully completed the UHV workshop as per the AICTE, to teach UHV. Institute is planning for organizing FDPs/SDPs to train the faculties and students on NEP.
2. Academic bank of credits (ABC):	Institution is ready to register on Academic Bank of Credits (ABC) system via National Academic Depository (NAD) to ensure student mobility. Further, the institution is planning to introduce joint degree courses in collaboration with premier universities in India and abroad, subject to flexibility given by VTU to affiliating institute and Regulations & Policies on ABC. Faculties and students are introduced to ICT based technologies for Teaching/Learning, Experiential Learning and assignments.
3. Skill development:	Institution firmly believes in comprehensive holistic growth of students by nurturing them through training for technical skills, life skills, Human values, societal concern and Environmental awareness. The institute takes care of trainings in Technical, soft-skill through its knowledge partners. Institute has active clubs viz., Speakers club, Nature club, NCC, NSS which ensure to impart life skills, society and environmental concern etc. Institution is planning to introduce skill development courses for students in line with NSQF. The institution has MoUs/Academic collaborations with reputed organizations and Industries viz., ISRO, IIIT-Allahabad, Toyota-Kirloskar, and Kumamoto University etc. to enhance skill-sets.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Institute is bound by the University curriculum, noncredit courses which contains IKS aspects viz., Vedic Mathematics, Traditional Indian medical system etc., shall be introduced as course in the coming years. In this regard Institute has initiated awareness programs on the above-mentioned aspects of IKS to students. Institute houses students from different cultural and state origin thereby the campus harbors diverse culture. The Institute puts all its efforts, to bring Unity in Cultural Diversity and Religious Harmony through its various programs viz., Traditional day, Cultural fests, Celebration of Deepavali, Christmas, Ifthaar etc. The Institute has active cultural club which hosts different programs to reflect cultural

	diversity of India.
5. Focus on Outcome based education (OBE):	The two departments of AIET namely CSE and ECE are already accredited during 2019 by NBA. OBE is well practiced at the Institute and the IQAC strictly monitors the activities implemented. Further, students and faculties are made aware about OBE time to time.
6. Distance education/online education:	The Institute promotes online education through online internships, online certification courses, NPTEL courses etc. Faculties and students are using online platforms viz., google classroom, e-resources etc., for TLP in blended mode. The Institute encourages the students to participate in online based Hackathons and competitions organized by reputed institutions across India.

Extended Profile

1 Program

1.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
296	299	297	291	285

File Description	Document
Institutional data prescribed format	<u>View Document</u>

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
7	6	6	6	6

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1722	1743	1884	2153	2361

File Description	Document
Institutional data in prescribed format	View Document

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
169	159	159	159	164

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.3

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

File Description		Document			
553	582	551	630	661	
2020-2	21 2019-20	2018-19	2017-18	2016-17	

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
116	128	150	166	171

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
115	125	125	171	171

File Description	Docur	nent	
Institutional data in prescribed format	View	Document	

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 52

4.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
422.9	463.11	596.8	1024.89	1950.84

4.3

Number of Computers

Response: 912

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Alva's Institute of Engineering and Technology (AIET) is **affiliated to Visvesvaraya Technological University (VTU) and the syllabus is prescribed by the affiliating University**. In line with the syllabus prescribed by the University, the teachers prepare curriculum teaching learning strategies in alignment with the Vision & Mission of the institution. The curriculum feedback analysis from different stakeholders is also considered while preparing the teaching learning strategies. At the beginning of the semester, IQAC of the institute mandates that every department prepares curriculum teaching learning strategies and submits the same for approval and deployment.

The Chairman of IQAC (Principal) conducts meetings with the HoDs for delivery strategies and effective implementation of the curriculum teaching learning strategies. The HoDs conduct departmental meetings before semester commencement to formulate a curriculum delivery blueprint which include preparation of lesson plan and classroom presentation (chalk-talk and ICT).

Institute prepares Calendar of Events (CoE) by considering University mandated academic schedule and circulated to all departments & students. The CoE contains details such as commencement of semester, last working day of semester, schedule of internal assessments, induction programs, technical talks, workshops, certification courses, industrial visits, social activities, project evaluation phases, FDPs etc. IQAC ensures that the academic activities are executed as per the CoE.

Teachers maintain course files (teaching learning strategies) to record the lesson plan and delivery in each semester. The course file includes CoE, syllabus, course outcomes (COs), lesson plan, students' attendance, IA question papers & scheme.

Teachers are encouraged to impart the curriculum through effective teaching methods viz., audio/visual presentations, assignments, workshops, seminars, internships and projects, besides traditional chalk & talk methods. ICT enable the teachers to ensure effective delivery of curriculum. Learner centric activities viz., certificate courses and add-on courses are also employed for the effective delivery of the academic courses. Institute encourages students & faculties to participate in Workshops/ Conferences/ Seminars organized by the University and other relevant bodies so as to update their knowledge and to improve the learning practices.

Feedback from Students, Faculty, Alumni and Employers on curriculum is taken at the end of the semester and is given due importance for continuous improvement in curriculum plan and delivery. IQAC monitors and ensures the suggestions received from the feedback regarding curriculum and are implemented considering the University syllabus by incorporation of content beyond syllabus.

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File Description	Document
Upload Additional information	<u>View Document</u>

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

Response:

Institute's IQAC mandates each Department to prepare Strategic Perspective Plan (SPP) in sync with the Academic Calendar, provided by the affiliating University, i.e., Visvesvaraya Technological University (VTU).

Accordingly, HoDs convene departmental meeting to guide the faculties to gather inputs for preparation of SPP. The SPP of all the Departments are consolidated by IQAC, to chalk out the overall SPP of the institution and its deployment strategies for quality achievement, sustenance and enhancement. IQAC ensures SPP of the institution is in sync with the University Academic Calendar, including the conduction of Continuous Internal Evaluation (CIE) of the institution. The University provides the regulations that contain subjects, syllabus, credits, and rules of curriculum. It also provides an academic calendar that specifies the date of commencement, last working day for each semester along with the examination dates. The Institute plans Curricular and extracurricular activities considering academic calendar provided by the University.

The IQAC formulates the institute's calendar of events in consultation with HoDs of all departments and submits the same to the Principal for approval. At the beginning of the academic session, the students are provided with the Institute's calendar of events and the same is displayed on the Institute's website as well as the notice boards.

The Institute adheres to the academic calendar provided by the University for the conduct of CIE. There are three internal tests per semester which are part of Formative Assessment and are conducted as per University guidelines.

The HoDs monitor and review the implementation of the CIE schedule regarding the Formative Assessment. To maintain transparency in CIE process, the Formative assessment marks & attendance are regularly updated to the parents. The Project works are scheduled & carried out as per VTU norms. The Project Review Team evaluates and awards marks. The uploading of Formative assessment marks is followed as per the schedule & directions of the University.

The University Calendar and regulations detail the Semester End Exam (SEE), Project work evaluation, Practical/Lab exams, for the Summative Assessment.

File Description	Document
Upload Additional information	View Document

1.1.3 Teachers of the Institution participate in following activities related to curriculum

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development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

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

Response: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Any additional information	View Document

1.2 Academic Flexibility

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

Response: 100

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

Response: 7

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

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

Response: 93

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

2020-21	2019-20	2018-19	2017-18	2016-17
12	16	23	22	20

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document
Any additional information	View Document

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

Response: 84.87

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

2020-21	2019-20	2018-19	2017-18	2016-17
1011	1392	1843	2093	2142

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

1.3 Curriculum Enrichment

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

Response:

Alva's Institute of Engineering and Technology (AIET) is committed to achieve holistic development of its graduates, through its Vision and Mission, by integrating the crosscutting issues such as Gender Sensitization, Environment Sustainability and Human Values & Professional Ethics. In this regard, the institute ensures curriculum teaching learning strategies are implemented which provides the skills, knowledge and the attitude necessary for rendering them into knowledgeable, empowered and value laden individuals. In addition to the syllabus provided by the University, the IQAC mandates that curriculum teaching learning strategies integrate cross cutting issues like Gender, Environmental consciousness, empathy for the community and good citizenship qualities.

The courses like Constitution of India, Professional Ethics & Human Values (CPH) and Environmental studies are introduced to students at different semesters as per curriculum. These courses

build human values, empathy skills, law abiding attitude, environmental concerns and ability to extend a helping hand to the immediate community.

AIET has set up Committees/Clubs like **Women Empowerment Cell**, **ROSTRUM – speaker's club** and **SRISHTI – nature club** which provide a framework for both teachers and students to negotiate with the ideas like Gender equity, Environmental concerns and other graduate attributes.

Institute encourages faculty and students to participate in events focusing on women empowerment. The women empowerment cell takes part in the conduction of special lectures on gender related topics on various occasions. Girls and Boys participate in various co-curricular and extra-curricular activities. Workshops and seminars related to women's empowerment and prevention of sexual harassment are being conducted in the institute.

There is an immense need to create awareness among the stakeholders regarding the need to sustain and preserve environment. **Shobhavana** – *herbal garden* and **Birds park in the campus** maintained by the institute adds to the green ecosystem. **NSS** activities are aimed at creating awareness on environmental protection and ecological preservation. Programs like **Swachh-Mijar** and Beach cleaning-a neighborhood cleanliness campaign inspired by **Swachh Bharath** are core programs of **NCC** & **NSS** units of institute.

To inculcate human values among students, the institute has introduced series of sessions titled 'Personal Holistic Competence Foundation Course (PHCFC)'. Rostrum – a speaker's club, caters to the needs of students/ faculties and the institute as a whole in terms of inspirational talks by eminent personalities such as N Santosh Hegde (Former Supreme court judge), Salumarada Thimmakka (Padmashri Awardee & Veteran Environmentalist), Subramanian Swamy (Politician), Manishankar Iyer (Politician), A. S. Kiran Kumar, former Director ISRO (Padmashri Awardee, Scientist & Academician), Guru Gaur Gopal Das (Motivational speaker on Human values) etc., who have made a difference in the society.

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

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

Response: 78.9

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

2020-21	2019-20	2018-19	2017-18	2016-17
227	228	243	229	231

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Any additional information	View Document

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

Response: 95.01

$1.3.3.1\ \textbf{Number of students undertaking project work/field work / internships}$

Response: 1636

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

1.4 Feedback System

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

Response: A. All of the above

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

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

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

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

File Description	Document
Upload any additional information	<u>View Document</u>
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 66.52

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

2020-21	2019-20	2018-19	2017-18	2016-17
480	425	359	558	625

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
780	720	720	720	738

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

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

Response: 71.36

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

2020-21	2019-20	2018-19	2017-18	2016-17
111	110	101	122	134

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

2.2 Catering to Student Diversity

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

Response:

Alva's Institute of Engineering and Technology considers that the learning abilities of the students are measured before the course commencement, to customize the teaching-learning strategies, to suit the need of the students. Often, the learning of a student is affected by different backgrounds viz., socio-economic, learning methods adopted in preceding school and peer group influences. Furthermore, influence of mother tongue and the rural-urban divide also play spoil-sport. In this regard, institute makes efforts to evaluate the mixed abilities of the students and to establish a symbiotic bond between the teacher and the student to improve learning.

For the first year (I-II semester) students, performance of the student in qualifying examination, i.e. Pre-University examination are considered for categorizing them as Advanced Learners and Slow Learners. IQAC of Institute has developed a policy for teaching-learning practices and student mentoring to promote quality. Teachers incorporate student-need strategies suggested by IQAC in terms of tools, methods, participation, hands-on etc.

In case of students in III-VIII semesters, their performance in the Semester End Examination (SEE) becomes a benchmark to categorize them as advanced and slow learners.

Often students without any backlog are identified as advanced learners and they are provided with challenging tasks and slow learners are provided with incubation strategies as discussed below,

FOR ADVANCED LEARNERS:

- Nominated as Class representatives.
- Nurtured as student coordinators of Technical forums/ Value-added labs.
- Trained and encouraged to exhibit their projects/ ideas at department/ institute level exhibitions as team leaders.
- Trained and encouraged to take up qualifying exams for higher studies and other competitive examinations.
- Encouraged to participate in associated organization activities viz., internship, project work, workshops & trainings and national/international conferences.

FOR SLOW LEARNERS:

- Coaching/ Crash Courses for the required subjects.
- Meetings are organized with parents of the slow learners and respective faculty members in the presence of HoD to discuss academic performance. In special cases, discussion takes place in presence of Principal.
- Encouraged to participate in associated organization activities viz., internship, project work, workshops & trainings and national/international conferences.

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Both slow and advance learners are provided with common trainings viz., Bridge course during first year to refresh fundamentals, Aptitude, soft skill training to improve their employability. Further they are also encouraged to participate in Entrepreneurship Development Cell, Sports, Cultural, NCC and NSS activities for overall development. Mentor-Mentee system facilitates Learners' Triangle' initiative, provides focused positive partnership between parent-student-teacher for better learning ecosystem. Counseling is provided by Professional counselor for needy students. Both slow and advanced learners are also encouraged to represent as coordinators for various non-technical clubs.

File Description	Document
Upload any additional information	<u>View Document</u>

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)	
Response: 15:1	
File Description	Document
Any additional information	<u>View Document</u>

2.3 Teaching- Learning Process

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

Response:

Institute focuses on imparting technical knowledge which enhances critical thinking and gives scope for creative imagination among students. The institute follows the student centric methods for enhancing the learning experiences by implementing below mentioned learning methods viz.,

- Experiential learning
- Participative learning
- Problem solving methodologies
- Experiential Learning:

The students are provided with the following types of learning mechanisms to improve experiential performance

• Value added Labs/ Content Beyond Syllabus

The students are tutored to conduct experiments and test the theoretical concepts that are learnt in classroom. This enhances their experimental knowledge and skill. As an affiliated institution the programs are bound to follow the syllabus set by the University. Hence, it is necessary to identify the curricular gaps and take measures to bridge it by supplementing with content beyond syllabus.

The following *value-added* labs facilitates the students in experiential learning

- Innovation & We: Students are encouraged to carry out interdisciplinary projects.
- Linux Lab: Students are encouraged to use open-source software for their projects.
- Apple iOS Lab: Students are trained and encouraged to build iOS apps.
- e-Yantra Robotics: Provides platform for students to understand the theory by using applications of Robotics.
- MEMS Lab: Provides platform to assimilate microscale physics concepts and Micro-Electro-Mechanical-Systems (MEMS) applications.
- Envision: Provides arena for multifield prototyping and realization of ideas in project.
- CNC labs: Provides hands-on experience in the area of Computer Integrated Manufacturing.

• Library Resources

The Institute's Library provides quality service and a vibrant collection of Books, References and study materials to support the mission, goals, educational, and research needs of students & staff in support of the Institute's diverse curriculum. The e-Resources such as digital library, e-Journals (IEEE, Springer, Science Direct) of VTU consortium are accessed through local and remote access using *Knimbus* platform, by students.

• Industrial Visits

Students witness the functioning of the curricular concepts in real time during their industrial visits conducted. Further they progressively interact with the knowledge experts as part of their experiential learning.

• Student Internships

The Industry-Institute MoU activity facilitates students with an opportunity to pursue their internship and projects in their relevant fields. This allows them to gain practical experience of the technology and environment which enhances their career skills.

• Participative Learning:

Students are engaged in following participative learning initiatives,

• Classroom student centric activities

Institute adopts student centric activities such as Seminar, Quiz and Group Discussion etc. to enhance participative learning.

• Placement Related Learning

To enhance employability skills in students, the institution organizes training programs viz., Aptitude, Soft skills, Group Discussion and Personality development.

For the final year students, exclusive placement related training is provided through *Boot camp* to facilitate placement.

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• Technical Activities

For enhancing the learning skill of students, institute involves them into technical activities viz.

- Workshops/Certification Programmes/Seminars
- Technical talks by experts from Industries, R&D centers & academia

• Problem solving methodologies:

To enhance the problem-solving methodologies, students are exposed to competitive events such as Hackathons and Ideathons. Students are also involved in Consultancy Projects.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Response:

AIET is committed to provide opportunities for both the teacher and the student to interact with the ICT to provide better and enhanced teaching-learning experience. The institution makes proactive efforts to provide the infrastructure support system to the faculty to make use of the ICT resources.

ICT Enabled Resources:

To have innovative teaching and effective learning, institute provides ICT enabled class rooms and seminar halls with internet connectivity.

- Concept Based Visual Learning Methods: The videos and physical working models are utilized for concept comprehension among students.
- *Google Classroom:* Teachers use Google classroom for sharing lecture materials, assignment submissions to enhance students learning skills by active involvement.
- Language lab: Language Lab facilitates a student to learn the English language through interactive manner of learning experience.
- *e-learning:* The Course teacher orients students to take up e-learning facilities to enhance the learning experience beyond the classroom through digital platform viz.,
 - e-Shikshana a VTU initiative on digital platform, where in contents delivered in real time by experienced faculties of affiliated institutes and an interactive session between teacher-student is facilitated.
 - Online Course Platform:

National Programme on Technology Enhanced Learning (NPTEL)- The students are encouraged to register to NPTEL courses and take up examination which awards them a certificate after completion of the course.

Further, students are encouraged to take up online courses in different skill enhancing course providers such as Coursera, Oracle Academy etc.Students get benefitted through working on hands-on experiences.

- *Digital Library for self-learning*: Teachers encourages students to use digital library for their self-learning. The digital library comprises of many e-resources viz., CD-ROM, NPTEL contents, *e-journals* on *Knimbus* (Visvesvaraya Technological University consortium) etc. Teachers uses the above-mentioned digital resources for their day-to-day activities viz., academic lectures, Project supervising and Research area. Accessing and referring these contents helps students to work on their desired technical projects and also to instill research temperament. Teachers and students utilize plagiarism software (TURNITIN) to publish technical review/research papers in journals/conferences.
- Video recording: Online class videos of teachers are made available in the Google Classrooms for recap of the classes by students.

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

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

Response: 18:1

2.3.3.1 Number of mentors

Response: 97

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

2.4 Teacher Profile and Quality

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

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Response: 104.07	
File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

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

Response: 16.25

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

2020-21	2019-20	2018-19	2017-18	2016-17
25	23	26	25	16

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

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

Response: 5.34

2.4.3.1 Total experience of full-time teachers

Response: 619.2

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

2.5 Evaluation Process and Reforms

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

Response:

The Institution follows Internal Assessment methods as directed by Visvesvaraya Technological University (VTU) which is diligently developed, implemented and has made as regular practice. The methods incorporated are transparent and robust in terms of frequency and mode. The Examination Committee nominated by the Head of the Institute will initiate the process of CIE through notification in the beginning of the academic year.

Continuous Internal Evaluation (CIE) through Internal assessment

- The internal assessment comprises of 3 Internal tests conducted periodically i.e. 6th week, 10th week and 14th week after commencement of the semester as indicated in academic calendar, this is in line with frequency suggested by VTU.
- The Internal Test question papers and scheme of evaluation that are prepared as per Outcome Based Education (OBE) norms using Revised Blooms Taxonomy, are submitted to department IQAC for approval prior to the Internal Test.
- Internal tests are conducted as scheduled under the supervision of Internal Assessment (IA) coordinator. The evaluation system is robust, as answer scripts are evaluated according to the scheme of evaluation.
- Students are allowed to view their answer scripts for clarification with concerned faculty to ensure transparency. In the event of unresolved issues, the students can escalate the matter to the Head of the Department (HoD).
- The bitwise marks of each internal test are tabulated for calculation of Course Outcome Program Outcome (CO-PO) attainment.

Continuous Internal Evaluation (CIE) through Assignments

A course teacher is allowed to choose any mode of Assignments such as

- Descriptive & Numerical: To enhance their learning levels.
- Group Presentations/Subject Seminars: Inculcate learning essence like confidence, communication skills etc.
- Quiz: MCQs to assess the learning levels.

Continuous Internal Evaluation (CIE) for Project Work

- The assessment of final year projects is done at various phases such as Synopsis, Design, and Implementation & Deployment of the project.
- A team consisting of HoD, Project coordinator and two senior faculty members review and finalizes the project.
- The Progress of the project is reviewed by project coordinator in phase wise manner to ensure right quality and timely completion of the same.
- At the beginning of the Final Year (7th semester) Phase-I review is planned to scrutinize project

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feasibility, objective and methodology.

- Phase-II review is conducted after 3-4 months of the Phase-I review to ensure timely progress.
- The Phase-III review is conducted 2 weeks before the last working day of the 8th semester, which ensures timely completion with the planned objectives viz., Publishing in reputed Journals, Product development etc. as outcome.

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

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

Response:

The Institute's IQAC has devised an efficient mechanism to resolve internal/external examination related grievances. The Examination Committee oversees Institute's redressal of Internal Examination (Internal Assessment - IA) and External Examination (Semester End Examination - SEE) related grievances. The Course Teacher, Internal Assessment (IA) Coordinator and HoD takes appropriate measures to resolve internal examination (Internal Assessment - IA) related grievances through transparent, time-bound, efficient mechanism framed by the Institute. The Chief Examination Management System (EMS) Coordinator, being the convener of Examination Committee liaises between the Institute and University to resolve External Examination (Semester End Examination - SEE) related grievances.

Mechanism:

Grievances related to Internal Examination (Internal Assessment-IA)

- After timely evaluation of scripts of Internal Test as per scheme of evaluation, the Course teacher discloses the allotment of marks to respective students.
- The students are allowed to go through evaluated answer script in presence of course teacher and resolve their grievances, if any.
- If above mentioned grievance is not resolved, student escalates the matter to HoD for fair outcome.
- In special cases, the students failing to take any of the internal test due to inevitable reasons, are allowed to raise the issue to the I.A coordinator of the department, HoD is to arrange for alternative.

Grievances related to other Internal Assessments (Assignments and Laboratory Assessments)

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The grievances related to other Internal Assessments viz., Assignments, Project work are similarly carried out as stated in above section, in transparent, time-bound and efficient manner.

Grievances related to External Examination (Semester End Examination-SEE)

Institute is affiliated to University (VTU), thereby entire SEE process and also grievance resolving process rests with the same. The convener of Examination Committee i.e., Chief EMS coordinator acts merely as liaison officer, coordinating between Institute and the University to resolve External Examination (Semester End Examination –SEE) grievances in transparent, time-bound and efficient manner.

- The students are advised by the Examination Committee through University Examination Notification regarding External Examination (Semester End Examination-SEE) grievances viz., Hall Ticket, Name change in the mark sheet, application for revaluation, application for duplicate mark sheet etc., and bring it to the notice of Chief EMS coordinator.
- The Chief EMS coordinator communicates to University regarding the grievances raised by the respective student through an e-mail.
- The Chief EMS coordinator does the follow-up to resolve the grievances in time bound manner.
- The students are informed regarding the resolved status of the grievances raised by the same to ensure transparency in the process.
- The convener of Examination committee updates the status of all type of examination grievances to IQAC chairman (Principal of the Institute).

File Description	Document	
Any additional information	<u>View Document</u>	
Link for additional information	View Document	

2.6 Student Performance and Learning Outcomes

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

Response:

The institute follows Outcome Based Education (OBE) system as directed by Visvesvaraya Technological University (VTU), which is in line with the AICTE guidelines. The institute follows twelve pre-defined Programme Outcomes (POs) across all its engineering programmes to incorporate Graduate attributes as prescribed by National Board of Accreditation (NBA).

The POs adopted by the institute for its Engineering Programmes are as follows,

- 1. Engineering knowledge
- 2. Problem analysis
- 3. Design/development of solutions
- 4. Conduct investigations of complex problems
- 5. Modern tool usage
- 6. The engineer and society
- 7. Environment and sustainability
- 8. Ethics
- 9. Individual and teamwork
- 10. Communication
- 11. Project management and finance
- 12. Life-long learning

The Institute adopts following POs for is Post Graduate Program Masters of Business Administration:

- 1. Sound Theoretical knowledge
- 2. Communication Skills with Lateral and Critical Thinking Ability
- 3. Ethical leadership and Social Consciousness
- 4. Self-sustaining Entrepreneurial Qualities
- 5. Research Orientation
- In Addition to well defined POs, each department has minimum 2 and maximum 4 Program Specific Outcomes (PSOs) as defined at the departmental level.
- Every course has 3-6 Course Outcomes (COs).
- Departmental IQAC approves COs, CO-PO/PSO mapping, levels of mapping, and the justification behind each mapping. Moreover, the assessment tools are also mentioned by the course teacher, and all these are validated by the Module Coordinator (Internal Subject Expert- a department IQAC Member).

Display of stated POs, PSOs and COs:

- The approved POs, PSOs and COs are disseminated to the stakeholders and published in the websites, IA Test booklet (blue books), lab records, lab manuals, e-newsletters, HoD & Faculty rooms, laboratories and Department corridors.
- The HoD of each program conducts awareness session on POs, PSOs and its mapping with COs to course handling teachers/faculties.
- The course teacher conducts PO/PSO & CO awareness session during regular classes. The students are mandated to write and assimilate PO, PSOs and COs in their blue books, lab records, lab manuals, and assignment books of each course.
- The institution uses Management Information System –MIS(ERP) education platform to state, display and communicate the COs, POs, PSOs, course wise mapping of COs with POs/ PSOs to Students and Faculties.

• The COs are also communicated to students through Continuous Internal Evaluation (CIE) question papers Viz. Internal test question papers, assignment question papers wherein every question is mapped to relevant CO with Bloom's Taxonomy Levels.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Upload any additional information	<u>View Document</u>
Past link for Additional information	View Document

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

Response:

The institute adopts Outcome Based Education (OBE) system as recommended by National Board of Accreditation (NBA) to calculate the attainment of Course Outcome (CO) and Programme Outcome (PO)/ Programme specific Outcome (PSO).

- Module Coordinator (Internal Subject Expert departmental IQAC member) validates the balanced CO-PO/PSO mapping matrix prepared by the Course teachers to complete the process of Mapping in every semester. Further, the mapping matrix ensures that students are provided with expected graduate attributes defined in PO throughout the academic year.
- Each Course contributes for attainment of 2-6 POs/PSOs. Course teacher to frame 4-6 COs in respective Course and Module coordinator ensures proper mapping of COs with at least 2 or more POs/PSOs in accordance with potential of the course content.
- Module coordinator ensures systematic documentation of the CO-PO/PSO mapping at various levels as Highly (3), Moderately (2) and Slightly (1) based on contents of COs fulfilling the attributes of POs/PSOs.
- Revised Blooms Taxonomy levels are to be considered, while framing the COs and documented in the course file.
- The assessment of the COs involves Formative assessment tools (Internal tests, Assignment, Quiz, Seminar, etc.) and Summative assessment tool (Semester End Examination).
- Module coordinator ensures mapping of relevant COs with each Formative assessment questions (Internal tests, Assignment, Quiz, Seminar, etc.) by the course teacher.
- The CO-PO/PSO attainment levels through Formative assessment and Summative assessment are ascertained as per following criteria
 - Level 1: if 50% of students score >50% of marks*
 - Level 2: if 60% of students score > 50% of marks*
 - Level 3: if 70% of students score > 50% of marks*

• Direct CO-PO/PSO attainment is calculated by allotting a weightage of minimum 50% each to attainment through Formative assessment and Summative assessment.

• Further, Course end surveys are conducted (Except First year courses) to obtain voice of students

- on attainment of COs and POs at the end of each semester for Indirect assessment. The CO-PO/PSO attainment calculated based on Course end survey is termed as indirect attainment.
- Each course consists of 'Direct CO-PO/PSO attainment matrix' and 'Indirect CO-PO/PSO attainment matrix'. In Direct CO-PO matrix at course level, maximum value of CO attainment for a particular PO is selected as attainment of the respective PO. The same is brought forward to include in the Course-PO/PSO matrix of the entire programme. In the similar procedure, Indirect PO/PSO attainment is calculated.
- Final attainment of each of the POs and PSOs are calculated by allotting a weightage of 90% to Direct attainment and weightage of 10% to Indirect attainment.

The Module Coordinator and Department Advisory Board (DAB) suggests action points for continual improvement based on current attainment and the same is implemented by the Module coordinators, Course teachers of the respective subject in the next academic year.

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

2.6.3 Average pass percentage of Students during last five years

Response: 95.63

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

2020-21	2019-20	2018-19	2017-18	2016-17
526	566	545	596	611

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

2020-21	2019-20	2018-19	2017-18	2016-17
553	582	551	631	661

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding	teaching learning process
Response:	
File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document
Upload any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 22.75

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

2020-21	2019-20	2018-19	2017-18	2016-17
0.575	0.865	5.465	15.4	0.44

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

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

Response: 16.38

3.1.2.1 Number of teachers recognized as research guides

Response: 19

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	
Any additional information	View Document	

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

Response: 61.11

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	5	4	5	4

3.1.3.2 Number of departments offering academic programes

2020-21	2019-20	2018-19	2017-18	2016-17
8	7	7	7	7

File Description	Document
Supporting document from Funding Agency	<u>View Document</u>
List of research projects and funding details	<u>View Document</u>
Paste link to funding agency website	View Document

3.2 Innovation Ecosystem

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

Response:

Alva's Institute of Engineering & Technology (AIET) established by the Alva's Education Foundation (AEF) is committed to provide an excellent ecosystem for innovation and research. The institution has functional Research centres, Value-added labs and Entrepreneurship Development Cell (EDC). The institution makes all positive efforts to nurture innovation ecosystems and to cultivate research environment.

Institute's **Initiatives** in nurturing faculty and students as researchers, through financial support in building an **Innovation Ecosystem**, have noteworthy **Outcome**.

INITIATIVES

Institution has a practice to sponsor faculty members for their higher studies (PhD and Postdoc). The research ecosystem through initiatives of institute has facilitated aspiring research scholars to publish scientific results in journals of national and international repute. Further Principal Investigator of any funded project are entitled for 10 % of research grant received as research incentive according to the institution policy (see Page 48 section 1.3 of Service rule document).

INNOVATION ECOSYSTEM

Research labs

VTU recognised research centres and value-added labs of the institute augment to the research ecosystem. The value-added labs cater the students of the institute with experiential and participative learning pertaining to content beyond syllabus.

The value-added labs are:

- Apple iOS Lab
- Innovation & We Lab
- Envision Lab
- MEMS Lab
- E-Yantra Robotics Lab
- IC Engine Lab
- Nano Organic Electronics & Earth's Field NMR Lab
- Centre For Bio Based Product Development (Composite Lab)
- ACAR (Alva's Centre for Advanced Research)
- CNC machinery Lab
- Edwin's Linux Lab

Entrepreneurship Development Cell (EDC)

EDC aims for the overall development of the student fraternity in Entrepreneurial skills. An active MoU with EDII, Ahmedabad has extended knowledge support, financial grant for conducting Entrepreneur Awareness Camp & FDP.

The dedicated effort of EDC has resulted in creating awareness on government support system to students aspiring to become entrepreneurs. The above initiative of the EDC has resulted in small to medium scale enterprises. Few alumni have emerged as distinguished entrepreneurs.

OUTCOME OF ECOSYSTEM FOR INNOVATION

Students and Faculties have come up with innovative projects and below details out the outcome of the value-added and research labs,

- Students and Faculties have utilized **ACAR lab** and have filed and published **8** Patents.
- **E-Yantra and Robotics lab** has facilitated final year ECE students for their project "Feeder-Weeder" robot and thereby accounted for securing second place in the sixth edition of National-level e-Yantra Robotics Competition (eYRC-2017) held at IIT Bombay.
- Innovation & We lab has nurtured students from Mechanical Engineering (2016-17) to bag top runner-up position with cash prize of 1,00,000/- in ENGINEERIA 2016 International Competition organized by Corporate Office CADD Centre, Chennai, and also has helped the final year Mechanical Engineering students (2019-20) to secure 4th place in National Level Project competition, SPARKLE-2020 conducted by KPIT, Pune.
- IC Engine lab has given a platform to students to innovate a "Go Green Glow Green-Set 3" eco-friendly vehicle.
- Most of the above-mentioned **Value-added and Research labs** have been successful in publishing their research work in various national and international journals.

File Description	Document
Upload any additional information	View Document

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

Response: 100

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

2020-21	2019-20	2018-19	2017-18	2016-17
13	18	25	24	20

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

3.3 Research Publications and Awards

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

Response: 1.95

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

Response: 37

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

Response: 19

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

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

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last five years

Response: 1.81

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

2020-21	2019-20	2018-19	2017-18	2016-17
92	71	43	25	33

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	<u>View Document</u>

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

Response: 3.18

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

2020-21	2019-20	2018-19	2017-18	2016-17
71	99	158	79	58

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

3.4 Extension Activities

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

Response:

The institution inculcates social consciousness and responsibilities among its students through various

activities in the neighborhood community by its active units/wings such as Youth Red Cross (YRC), NCC, NSS, and departmental students' clubs/forums, for their holistic development. The students get a plethora of opportunities to actively participate in such events and activities, which in turn complement their all-round development.

Various extension activities with specific objectives are detailed out as follows:

Pollution control & Cleanliness:

The events include creating awareness among the students and the community on plastic pollution, air pollution and cleanliness. **Swachh Mijar** under **Swachh Bharath Abhiyan**, has been continuously practiced, and changes in the attitude of the public towards waste disposal have been witnessed. Apart from that, beach cleaning is also being organized regularly.

Environmental context:

To create awareness among the public to protect and conserve the environment, various activities like seed bombing, planting saplings, and events like green campaign, **Nature Fest**, **River Fest**, **Forest Day**, **World Water Day**, disaster management and **Parisara Sammelana** (**Environmental conference**) have been organized.

Sense of health care:

In addition to that, awareness on COVID-19, women's health, Hygiene and wellness and geriatric care has been done. Free health check-up camps and eye check-up camps are arranged for the villagers and the underprivileged. Blood donation camps are being organized regularly in association with local associations/organizations, viz., the Rotary Club, Lions Club, YRC and the blood banks.

Rural outreach:

Under Alva's Rural Outreach program, the students constructed toilet blocks in two underprivileged rural Government schools, one each in Neerkere and Marodi village. Training on **Pipe-composting** was given to Hosabettu local women association by students. Other activities include "**Kaliyona Computer**" (Computer awareness program) and **E-Shikshana** for the students of Government Schools located in rural areas, through which the basics of the computer were taught by the students.

Help the impoverished:

Unique activities for charity event by individual department forums such as **Amsa** (Movie show), **Varishta Kreeda Koota** (Rural games), **Daan Utsav** (Charity event) and **Kesard Onji Dina** (One day in a slushy field) are being organized, through which funds are raised and utilized for charitable purposes.

Campaigning Government policies and programs:

Certain Government programs have been organized such as creating awareness on digital payments (Cashless India), protection and education of girl child (Beti Bachao, Beti Padhao), and executing the program Swachh Pakhwada.

Literary, Cultural and Job fair:

Apart from all the above events, Alva's Education Foundation, Moodbidri, organizes various flagship events such as Alva's Virasat (National Cultural Fest), Alva's Nudisiri (Literary fest), Alva's Pragathi (Job fair), etc., which demand a fair number of volunteers at various levels. The student volunteers from AIET get an opportunity to be exposed to community service through such events.

As the students participate in a variety of activities, they inculcate human values, leadership qualities, communication skills, timeliness, decision-making, interpersonal skills, understand the dignity of labour, and develop a desire to serve the have-nots. It also helps them to be responsible by improving their confidence levels.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Response: 35

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	5	9	8	9

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

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 146

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

2020-21	2019-20	2018-19	2017-18	2016-17
26	33	35	26	26

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

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

Response: 96.68

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

2020-21	2019-20	2018-19	2017-18	2016-17
1515	1663	1884	2153	2361

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

3.5 Collaboration

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

Response: 294

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

2020-21	2019-20	2018-19	2017-18	2016-17
89	73	67	52	13

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

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

Response: 21

3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
3	2	7	3	6

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Institute has adequate infrastructure and physical facilities as per the norms of AICTE and Visvesvaraya Technological University (VTU) for teaching-learning.

Classrooms: Institution has 45 class rooms (average area of **120 square-metre**) with an adequate infrastructure viz. Green/Black board (for Chalk & Talk) projectors, CPU, Wi-Fi, seating arrangements (Desks and Benches), fans, classrooms with adequate illumination and ventilation.

Laboratories: Institution has curriculum labs considering VTU Syllabus and AICTE norms, **11** value-added research laboratory facilities to meet the needs of industries by focussing on the content beyond syllabus.

Auditorium & Seminar Halls: Institute is having one Auditorium with seating capacity of approximately **900** persons to conduct institute level curricular and co-curricular activities. Institute has **7** seminar halls spread over campus to fulfill overall activities of the departments.

Computing Equipment:

Institute facilitates with **912** computers for the usage of students and staff in classrooms, laboratory, library, office and other places as per requirement. These computers are connected to network system.

Library:

Institute's library occupies total area of **1540 square-metre** with seating capacity of **300** users. Over **24051** volumes and **47** journals are available for students and staffs. All books are accessioned according to serial number and stacked using **Dewey-Decimal-Classification-Scheme** (**DDC 21Ed.**). Library is automated with **RFID** system, barcode reader and automated circulation facility with **OPAC** (Online Public Access Catalogue). **Digital-library** is equipped with **11** PCs with Printer and Scanner to access e-journals and e-books database. Library provides **Mobile APP** and remote access facilities for self-learning of students/ faculties beyond institution hours. Library has photocopying facility for students and faculties on pay per use basis.

Internet and Wi-Fi:

Institute has **BSNL 1:1** leased line internet with **1000 Mbps** bandwidth. Also, there is a backup internet facility of **50 Mbps 1:1** Airtel leased line powered by *DeeNet*. Campus is Wi-Fi enabled to students and faculties to ease the process of e-learning.

Facilities at Entrepreneurship Development Cell (EDC):

EDC has computing facility with **20** PC, all-in-one printer, projector and Wi-Fi facility in an area of **149.5 square-metre**. This ensures the cell to conducts programs to create entrepreneurship awareness among students to develop as entrepreneurs.

Facilities at Training & Placement Cell:

Training & Placement Cell has 6 dedicated systems with LAN and Wi-Fi facility along with all-in-one printer and 2 Laser-Jet printers. Adequate cubicles are set in placement cell for group discussion. Institute has an active T& P team lead by its head for training activities, on-campus and off-campus recruitments.

Hostels

Institute has hostel facility for boys (capacity of **1241**) and girls (capacity of **720**). Hostels are equipped with internet enabled computers in warden's office for maintaining hostel records.

Electronic Surveillance using Closed-Circuit Television (CCTV)

Entire institute including hostel is covered under surveillance of **314 CCTV** camera facility for safety of students. Further, this would also facilitate monitoring of examination process.

To maintain uninterrupted power supply, generators of capacity 365 KVA and 320 KVA have been installed and are maintained by in-house electricians. Solar grids are installed in the college roof for additional power generation.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

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

Response:

Infrastructure for Cultural activities

Institute caters infrastructural facilities to accommodate cultural activities viz., theatre, musical, dance, etc. For nurturing these activities institute provides instruments for practice, Media center/ Studio, Auditorium and Open-air Theatre. Students are trained by experts in the above-mentioned areas for excellence.

Auditorium

Auditorium is used for cultural activities, training program, which is spacious enough to accommodate approximately **900** people. Auditorium is equipped with sound system, lighting system and ICT facility to create good ambiance for cultural activities.

Open-air Theatre

An open-air theatre with an area of **2184 square-metre**, which can accommodate more than **1500** people, has been established in the campus. It is used to conduct programs such as college day, traditional day, departmental fests etc.

Indoor and Outdoor Games:

Sports Complex is located in the vicinity of Alva's Education Foundation (AEF) at Swaraj Maidan, Moodbidri. Apart from this Palace Ground in Vidyagiri, Moodbidri, VIRASAT ground and AIET playground in Mijar serves as the arena for AIET's sports activities. The above sports arena includes facility like Synthetic Athletic Track (400 m) space for all field sports events viz., Javelin throw, Shot-put, Hammer throw, Discus throw, Jumps, etc. It also has a spacious playground for games like Basketball (2 courts-420 square-metre), Cricket (4000 square-metre), Football (4050 square-metre), Wrestling (total square surface of 12 m x 12 m), Kabaddi (130 square-metre), Kho-Kho (432 square-metre), Throw ball (224 square-metre), Badminton (82 square-metre), Ball Badminton (2 courts-288 square-metre) and Volleyball (3 courts-162 square-metre).

Institute facilitates training of students in aquatic sports using swimming pool located near Swaraj Maidan sports complex arena. Training is provided to students in all these sports by full time qualified trainers. Institution provides facilities for indoor games like Table-tennis, Caroms, and Chess.

Gymnasium

Gymnasium (218.2 square-metre) with fitness center provides an arena for the students to maintain fitness. Gym has qualified trainers for Weight lifting, Power lifting and body building. Gym is well equipped with all instruments required for the training and fitness.

Yoga

Yoga practice is facilitated to both boys and girls separately in a spacious halls in the campus. Yoga trainers help students in doing Asanas in proper way.

Alva's Education Foundation (AEF) encourages Sports and Cultural activities to its maximum extent. The sports materials, cultural instruments, costumes, ornaments and other accessories of AEF are shared with the institute as and when required.

As a result of the aforementioned benefits provided by the institution to students, cultural team has won championship at VTU level cultural competition for three years. Sports team has won several track and field competitions as well as team events.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 52

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

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

Response: 35.07

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

2020-21	2019-20	2018-19	2017-18	2016-17
26.25	97.03	112.12	494.59	1582.58

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

4.2 Library as a Learning Resource

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

Response:

The motto of the Institute's Library is to deliver the right information to the right user at the right time. Library is put to optimal use and is the place of dissemination of knowledge through both traditional and modern methods at the institute. The mobilization of the resource for the library is done using fully automated Integrated Library Management System (ILMS). ILMS is an application software as a part of

library automation. In this regard the institute has used following software versions:

- Year of Automation: 2009
- Name of the ILMS software: *EASYLIB Web Version 6.4a* (September 2021-till date), *EASY LIB Version 5.0*(2016-2021), *EASY LIB Version 4.3.3* (2009-2016).
- Nature of automation: Fully automated

Further library is equipped with RFID technology, enables to issue, renewal of books, maintain the database of books, journals, periodicals and the data of students & faculty who utilize the library resources.

OPAC Module: New upgraded software helps students and faculty to view library collection. Further users can check information like book due details, transaction statements, and reservation of books etc. on campus or remotely.

Digital Library

More than **42,000** e-resources are made available for users from the various publishers in the Digital library. Institute subscribes to e-Journals, e-books through VTU consortium. The *Knimbus* platform provides remote access of e-resources to registered users of the institute and also users can access the e-resources through Mobile Application.

Links for e-resources available are.

- 1. Remote access of e- resources: https://aietm.new.knimbus.com/
- 2. e- resources on Mobile App: *mLibrary* (Google Play Store)
- 3. NPTEL video lectures: http://192.168.101.65/localguru
- 4. Online Public Access Catalogue (OPAC): http://aiet.easylib.net

Besides, the library has books for competitive examinations, personal development, and Question bank facility. Separate racks are maintained for Books, Magazines, Journals, and Newspapers. Institute Library has subscribed to 10 newspapers and 8 magazines.

Library has a working area of 1540 square-metre in academic block II.

Timings

Monday – Saturday: 08.30AM – 11.00 PM

Holidays: 08.30AM - 01.00PM

Titles and Volumes

Total Number of Volumes – 24051

Total Number of Titles – 8080

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Total Number of Reference Books – 5874

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

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

Response: A. Any 4 or more of the above

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

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

Response: 16.58

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
17.26	12.32	18.16	15.29	19.87

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

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

Response: 13.28

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

Response: 244

File Description	Document
Details of library usage by teachers and students	<u>View Document</u>

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institute upgrades IT infrastructure to keep-up with technological uptrend by replacing the outdated peripherals, as and when required according to University curriculum.

Frequency of Update:

A.Y.2020-21: A PC of Dell Optiplex-i3 processor with 4GB RAM & 1TB Hard Disk was purchased and updated.

A.Y.2019-20: 57 computers of HP 280 G3 Core-i5 8thGen computers & No of HP Z2 G4T Server with 16GB RAM & 4GB Graphics & Dell T30 Server with Xeon processor and 8GB RAM were purchased and updated, 30 systems were shifted to sister institute of AEF.

A.Y.2018-19: No computers were purchased.

1.113 computers of Dell Vostro 3268 - 6th Generation & Dell Optiplex-i3 with 4GB RAM & Dell T30 Server with Xeon processor & 8GB RAM computers were purchased and the existing functional computers were updated.

A.Y.2016-17: 211 computers of Dell Vostro 3800 Core-i3 & dual core, Dell OptiPlex-i7 & 32 GB RAM

& Dell OptiPlex-i5 16 GB RAM, HP Core-i5 & Dell dual core laptop & One Desktop with i3, 4GB RAM were purchased. 107 PCs were shifted to sister institute of AEF.

As per current update, institute has upgraded IT infrastructure by connecting 912 computers with LAN & Wi-Fi connectivity.

Frequency of Up-gradation:

A.Y. 2019-20: On November 2019, RAM capacity of 60 computers of the Core-i3 system were upgraded from 4GB to 12GB in Internet Lab of Computer Science department. RAM capacity of 42 computers of the Core-i3 system were upgraded from 4GB to 8GB in Network Lab of Computer Science department.

On January 2020, RAM capacity of 16 computers of Core-i3 system were upgraded from 4GB to 8GB in ISE Lab of Information Science department.

On October 2019, RAM capacity of 30 computers of the Core-i5 8th gen system was upgraded from 4GB to 16GB in DS Lab of Computer Science department.

- 1.On October 2018, RAM capacity for 75 computers of the Core-i3 system were upgraded from 2GB to 4GB & Upgraded with 2GB Graphics card in CAMD Lab of Mechanical department.
- 2.RAM capacity for 30 computers of the Core-i3 system were upgraded from 2GB to 4GB in ISE Lab of Information Science department. Computer systems in various departments of the college were upgraded from 2GB to 4GB RAM.

Software Updates

Institute upgrades several Technical Software/Platforms through Licensed & open-sourced, subscribed modes for keeping up to date in terms with emerging trends. List of these Software/Platforms is detailed out as annexure in the additional information.

Internet & Wi-Fi

Augmentation of IT infrastructure is also to keep pace with changing dynamics of higher education & Technical world.

IT infrastructure comprises of BSNL1000 Mbps 1:1 leased line high-speed Internet facility and back up Internet line of 50 Mbps 1:1 Airtel Leased line powered by DEENET Internet Services.

Institute has more than 140 Wi-Fi access points with extenders provided to cover the wireless range throughout the campus.

Sophos XG 450 Next Generation firewall was deployed for handling enhanced load on network and applications, which also provides network security in the campus.

File Description	Document
Upload any additional information	View Document

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

Response: 2:1

File Description	Document	
Upload any additional information	View Document	
Student – computer ratio	View Document	

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.4 Maintenance of Campus Infrastructure

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

Response: 16.34

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

2020-21	2019-20	2018-19	2017-18	2016-17
69.79	99.23	135.39	161.51	104.28

File Description	Document
Upload any additional information	<u>View Document</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic

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and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The institute is surrounded by greenery with well-maintained infrastructure. The institute is awarded with the environment certificate for "Best Green Campus" by Pollution Control Board, Govt. of Karnataka.

Infrastructure Maintenance: Academic and hostel blocks are maintained by team of skilled people headed by administrative officer. The physical facilities are divided into sections like, **plumbing**, **electrical**, **building/infrastructure**, **garden and housekeeping**. Classrooms, Staffrooms, Seminar halls, Laboratories, Restrooms, Corridors, Open porches, Library, Food court and all other areas of the buildings are cleaned on daily basis through an outsourced Housekeeping Agency as part of **Annual Maintenance Contract (AMC)**. The Campus supervisor conducts periodic checks to ensure the working condition of the infrastructure.

A team of **in-house maintenance** comprising of electricians, plumbers, IT technicians working under Administrative Officer (AO) are deployed to monitor the maintenance activity of amenities viz., Plumbing, Lights, A/V system, Diesel Generator, Air Conditioners, CCTV cameras and Water Purifiers on regular basis. To maintain uninterrupted power supply, 2 **generators** of capacity 365 KVA and 320 KVA have been installed and are maintained by in-house electricians.

The campus is maintained by regular landscaping with variety of seasonal flowering plants and medicinal plant garden – Shobhavana, for healthy environment in the campus. Institute has an in-house team for garden maintenance.

Laboratories and Workshops: Laboratories and workshops of various departments are equipped with quality machinery and equipment, high precision instruments, necessary tools and components. Boards are displayed in the labs which contains the information and mandatory rules to be followed. Periodic reporting on requirements of repairs and maintenance of laboratory equipment are maintained in breakdown/maintenance register and the stock books of the laboratory by the lab instructors. The maintenance of the Laboratory is done as per the SOP.

A dedicated medical room is available for immediate attention of the concerned for the First Aid. Fire extinguishers are fitted at strategic locations. Periodic inspection regarding the usability and refilling of fire extinguishers are done by the external agencies.

Library: The Institute library is sufficiently spaced and well-stacked with volumes on each title corresponding to different subjects. Sufficient copies are maintained to cater to the needs of the students and faculties. Further, qualified and dedicated staffs are appointed to assist the students and to enhance the quality of the library experience. All the books are accessioned according to serial number and stacked using Dewey Decimal Classification Scheme (DDC 21Ed.). Obsolete books are removed from the stack and maintained separately in weed out section upon annual stock verification. Books that are defaced or torn, are sent for book binding.

Sports: Institute appointed Physical Education Director (PED), oversees and monitors daily sports activities. The PED and sports committee monitors preparation of grounds on need basis to conduct various Institute level and other sports events for students and staff members. The maintenance of equipment is done on-demand as per the prevailing policy and standard operating procedure. The Institute-

appointed Grounds-man carries out regular maintenance and housekeeping of the sports facilities. In addition to these, the shared sports complex facilities, at Swaraj-Maidan, is maintained with support of Alva's Education Foundation (AEF).

Transport facility: The transport facility supporting students and staffs for various academic activities are being maintained by central transport department of AEF. However, Institute-appointed campus-supervisor coordinates the transport section for better utilization of the facility as per standard operating process.

Hostel Maintenance: Hostels for boys and girls are within the campus which us under the supervision of Wardens, SWOs and Managers. Hostel food quality, other maintenance is monitored by a committee named **Quality Circle** to provide comfortable environment in the hostel.

IT Maintenance: All classrooms and seminar halls are equipped with projectors for quality teaching-learning experience and are under the surveillance of CCTV cameras. A team of well-trained technicians will maintain the computers and network related issues in the entire institute (including computers available in library, laboratory, office, staff rooms, hostels and any other) under the guidance of System Administrator.

The Institute strategically plans for the optimum utilization of existing infrastructure viz., computer labs, classrooms, Internet labs etc. and their resources by hosting different competitive exams conducted by National Testing Agency (NTA) under MHRD. Further it also extends its facility as Exam centre to conduct following Entrance/ Recruitment exams viz., ACCA, JAIIB, IIBF, KVPY, UGC-NET, CAIIB, JEE, BEC, Pondicherry Entrance Exam, CDAC, MTS, SSLR, NEET PG, KPTCL, SSB, CMAT/GPAT & MESCOM etc. Moreover Institute optimally utilizes its facility for implementation schemes of Government of India, such as, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) – a National Skill Development Council (NSDC) guided skill development scheme.

In addition to this, Fabrication unit of the institute supports minor structural fabrication and repair requirements of the institute on need basis.

File Description	Document
Upload any additional information	<u>View Document</u>

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 50.47

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
635	928	1058	1212	1175

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

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

Response: 22.68

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
539	594	350	341	321

File Description	Document
Upload any additional information	<u>View Document</u>
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	View Document

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

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

Response: A. All of the above

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

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

Response: 60.55

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

2020-21	2019-20	2018-19	2017-18	2016-17
729	1318	1612	1197	1030

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

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

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

Response: A. All of the above

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

5.2 Student Progression

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

Response: 52.28

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

2020-21	2019-20	2018-19	2017-18	2016-17
323	321	349	316	227

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	<u>View Document</u>
Details of student placement during the last five years (Data Template)	View Document

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

Response: 20.07

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

Response: 111

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

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

Response: 88.68

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

2020-21	2019-20	2018-19	2017-18	2016-17
8	16	14	19	11

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	19	16	19	12

File Description	Document
Upload supporting data for the same	<u>View Document</u>
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document
Any additional information	View Document

5.3 Student Participation and Activities

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

Response: 153

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	40	42	41	30

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

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

Response:

The Institution encourages the students' participation in administration, curricular co-curricular and extracurricular activities, by involving them to be the part of many of the committees. The Students' Council plays a major role in achieving this objective. The Institute has an active student council which is a part of various academic and administrative bodies/committees.

The purpose of the Students Council (SC) is to provide programs, activities and services which serve the co-curricular, cultural, social, extra-curricular and educational interest of students at the Institution. The institute maintains an excellent rapport with the student community. All the student association/committee/clubs/extracurricular activities/cells which mostly consists of advanced learners as a team leader and slow learners as team members. The students are also engaged in community services and extension activities through NCC, NSS, YRC and other clubs.

Student representation in various bodies/ clubs/cells are as follows:

1. Class Representatives

- 2.IOAC
- 3. Sports Committee
- 4. Cultural Committee
- 5. Department Association (Forum)
- 6. Placement & Training Cell
- 7. Entrepreneurship Development Cell
- 8. Women Empowerment Cell
- 9.NCC
- 10.NSS
- 11. Quality Circle (Hostel)
- 12. Discipline Committee
- 13. Anti-Ragging Committee
- 14. Prevention of Sexual Harassment Committee
- 15. Grievances and Redressal Committee
- 16. Professional Societies.
- 17. Various Clubs etc.,

Student's involvement in Value Added Labs -

Institute focuses on imparting technical knowledge which enhances critical thinking and gives scope for creative imagination among students. The institute follows the student centric methods for enhancing the learning experiences in addition to curriculum by implementing the following co-curricular value-added labs facilitates experiential learning

- 1. Innovation & We: Students are encouraged to carry out interdisciplinary projects.
- 2. Linux Lab: Students are encouraged to use open-source software for their projects.
- 3. **Apple iOS Lab**: Students are trained and encouraged to build iOS apps.
- 4. e-Yantra Robotics: Provides platform for students to understand the theory by using applications of Robotics.
- 5.**MEMS Lab**: Provides platform to assimilate microscale physics concepts and Micro-Electro-Mechanical-Systems (MEMS) applications.
- 6. Envision Lab: Provides arena for multifield prototyping and realization of ideas in project.
- 7. CNC Lab: Provides hands-on experience in the area of Computer Integrated Manufacturing.

In addition to the above, the students are encouraged and empowered with certain responsibility in organizing the Alva's Education Foundation level activities such as

- 1. Alva's Nudisiri National Level Literary and Cultural Fest
- 2. Alva's Virasat Alva's Flagship cultural event
- 3. Alva's Pragati Mega Placement drive

Thus, students of the Institution are given opportunity to participate in various Administrative, Academic, Co-curricular and Extra-curricular activities of the Institution.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Response: 24.8

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	41	37	23	19

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

5.4 Alumni Engagement

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

Response:

Alva's Institute of Engineering& Technology (AIET) has working Alumni Association since 2015 and was registered in 2021 (DRDK/SOR/13/2021-2022 dated 5th July 2021). The members of the association are the representatives of diverse Alumnus gambit and are working professional from different streams of Engineering & Management namely CSE, ISE, ME, ECE &CV and post-graduate Department of Business Administration. The alumni meet is organized at least once in a year. The main objective of the alumni association is to create and maintain a lifelong connection between Institute and its Alumni. The integral task of the association is to build an engaged membership base. Every year the exit feedback is collected from the outgoing students. The data is collected, analysed and used for present &future initiatives of the institute. The Alumni Association has been functional as a significant contributing stakeholder in shaping the policies and overall development of the institute.

Alumni contribution

The registration of the alumni is being done with a payment of nominal membership fee to the AIET ALUMNI ASSOCIATION during the final semester. This forms a base contribution from the alumni.

Alumni of the Institute contributes to the enhancement of the facilities through book donation

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(departmental library), cupboards etc. Successful entrepreneurs, professionals and project team leaders from the alumni are invited to give a talk on their success stories. Our alumni have helped the department in student internship and project work. Further, alumni have facilitated in placing students in companies through references. The alumni members are actively participating in organizing and executing technical activities, sharing inputs to upgrade the academic course curriculum with respect to changing scenario.

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

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

Response: A. ? 5 Lakhs

File Description	Document
Upload any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

Institute has well defined Vision and Mission statement incorporating focus and core ideology as shown below:

Vision of the Institution

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

Mission of the Institution

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students' community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

The governance of the institute is setup as below to ensure proper functioning and accomplish the Mission, thereby achieve the Vision of the institute.

- Governing Council (GC) is headed by Dr. M Mohan Alva, Chairman, Alva's Education Foundation (AEF), Moodbidri. Principal of the institute serves as the Member Secretary of the GC. In addition to this, GC comprises eminent personalities from the society, Academicians, Faculty representatives, State Government & University representatives. Along with the GC, the administrative activities are supported by Finance and Purchase committees for the smooth conduction of all the academic and financial activities to meet the vision and mission of the institute
- Internal Quality Assurance Cell (IQAC) is chaired by Principal and is assisted by its members (Deans, Head of the Departments), Administrative Officer and Conveners of various Institute Level Committees. The various Committees such as Examination committee, Research & Development (R&D), Entrepreneurship Development Cell (EDC) and Training and Placement (T&P) Cell direct the day-to-day functioning of the Institute. Heads of Departments, Coordinators of various Committees and Cells prepare the plan (Curricular, Co-curricular & Extracurricular activities) in line with the Vision & Mission of the institute as per the direction of IQAC.

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The IQAC ensures effective execution of teaching methodology of courses, maintenance of academic standards, and student welfare. This would bring transparency to the governance and inherently encourages participative management thereby aligning to the Vision & Mission of the institute.

Quality policy

The Quality Policy aims to make Alva's Institute of Engineering & Technology striving for excellence by continuously improving the quality management system's effectiveness and scholastic ability. The institution's governance is thus indicative of effective leadership and provides opportunities for involvement of stakeholders. IQAC regularly ensures Governance is transparent and in line with the institution's Vision and Mission.

File Description	Document
Upload any additional information	View Document

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

Response:

Alva's Institute of Engineering & Technology (AIET) has a decentralized and transparent process in management, administration, financial and academic affairs. Institute believes in delegating responsibilities from higher-level management to lower-level, which encourages management to concentrate on policy making and major decisions.

- Governing Council (GC), headed by Dr. M Mohan Alva, Chairman, Alva's Education Foundation (AEF), Moodbidri and, the Principal of the Institute as the Member secretary of the GC.
- Internal Quality Assurance Cell (IQAC) plays a pivotal role in quality assurance, sustenance and enhancement through visioning and deployment besides review for quality assurance. Decentralization is ensured through the approvals provided by the Governing body to the Perspective plan deployment strategy and the budget. Once the approvals are given, the Heads of the Department have liberty to take decisions related to governance, academics, evaluation etc.
- **Students'** Council comprises of Class representatives, Coordinators of various Clubs/Committees/Forums etc. These council members are involved in preparation of SPP deployment strategies and execution of the same. Further the student council members participate in Quality Circle (Hostel). The Quality Circle works with the objective of systematic improvement of quality of food and other related issues.
- Alumni are significant stakeholders in terms of their participation and contribution towards comprehensive development of the Institution. The feedback of alumni is considered in framing Vision & Mission of the Institute, Curriculum planning, Training & Placement needs etc. Feedback received by alumni forms a salient indicator for the continuous improvement plans of the institute.

The above description suggests a participative management and decentralization of governance through involvement of various stakeholders.

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CASE STUDY

A case study on *Organizing International Conference on Science & Technology* at the institute demonstrating effective leadership through decentralization and participative management is given below.

Dr. Jayarama A, Associate professor, Department of Physics and Dr. Satyanarayan, Associate Professor and Head of the Mechanical Engineering Department approached the IQAC of the institute with a proposal to organize an International Conference on Science & Technology by collaborating with premier academic institute, research Centre and Industries. AIET is committed towards fulfilling its Vision of Transformative Education by Pursuing Excellence in Engineering Education, through its Mission of inculcating research temperament among the individuals. In this regard, IQAC chairman briefed to all, that the conference shall be jointly hosted by Department of Mechanical Engineering and Department of Electronics & Communication Engineering of AIET.

Organizing Committee planned to organize an **International Conference** by involving employees of AIET, bearing in mind the sophisticated modality of the same, thereby sufficing the concept of decentralization of powers and participative management. Organizing Committee, in consultation with the conference partner - IIT Madras, finalized the theme and title of the conference as International Conference on Laser Deposition "**iCOLD-2019**".

More information about organizing iCOLD-2019 can be found in upload any additional information.

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

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Governing council of the institute forms the Strategic Planning Advisory committee (SPAC) to formulate the Strategic Perspective Plan (SPP) of the institute. SPAC will gather inputs from various stake holders by collecting feedback while preparing SPP. SPAC analyzes feedback for constructive formulation of action plan and this remains as base document for formulation of SPP. Formulated SPP is approved by the Governing Council (GC). SPAC envisions Long-Term-Goals for development of Institute, as stated below,

Long-Term-Goals of Institute are,

- Autonomous College by 2024, Deemed-University by 2028 and Institution of Eminence by 2032.
- Acknowledged as Most Highly Respected University/Institution focused on Teaching and Learning by 2032
- Sustain and Enhance Excellence in Academics, Research and Social Impact.

- Expand the global-footprint by having students from around globe enrolling in 'Alva's Institute of Engineering & Technology' programs.
- Create a sustainable, world-class, infrastructure that creates an effective learning environment.

To fulfil Long-Term-Goals, institution has following **Short-Term-Goals**,

- Attain accreditation and ranking viz., NBA for all branches, NAAC, NIRF, ARIIA etc.
- Enrich industry specific skills in students through add-on courses, internships etc. in association with various premier Institutes & Organizations via MOUs/Peer connections, thereby improve placements in core sectors.
- Encourage students & faculties to participate in National/International conferences and publish their technical/project work, thereby increase number of patents, publications, funded projects and consultancy works.
- Encourage faculty & students Start-ups in the campus.
- Support green initiative- extend usage of solar-power, green-building, green-energy, Plastic free campus, Paperless digital campus etc.

During commencement of every academic year, IQAC prepares institute level SPP deployment strategy and reviews, through all Heads and Conveners of Clubs/Forums/Committees and in sync with University Calendar of events. To fulfill Long-Term-Goal and Short-Term-Goals, IQAC ensures interweaving of activities into SPP deployment strategy. IQAC mandates to provide proposal of budgets from concern along with SPP deployment strategy, which is forwarded to Finance and Purchase committee for review. The committee reviews and forwards SPP deployment strategy to GC for further approval. IQAC ensures approved SPP deployment strategy is implemented through various Heads and Conveners of Clubs/Forums/ Committees and conducts periodic review.

CASE STUDY: Successful implementation of Strategic Perspective Plan (SPP) on Green Energy Initiative:

Institute is committed towards fulfilling its Long-Term-Goals on green-energy initiatives through usage of Renewable-energy. In 2013 institute started with first green energy initiative by installing solar-water heaters in students' hostel. Institute installed LED bulbs in 2017 and incrementally changed all illumination to LED to reduce power consumption. Later in 2018, Institute adopted risk free, third party, Built-Own-Operate basis power agreement mechanism for solar-power with *M/s ReNew Power Pvt. Ltd.* This enables institute to reduce the component of electricity consumed that are generated through non-renewable/ conventional sources, thereby aligning to green-energy. Solar-plant has the generating capacity of 0.99 MWp. The system consists of solar-panels spread over 10000 Sqm. with DC to AC converter. This solar power-plant operates automatically with On-Grid metering system. The amount of energy which is generated by solar-panels is directly supplied towards load; remaining energy can be taken from the grid.

File Description	Document
Upload any additional information	View Document
strategic Plan and deployment documents on the website	View Document

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

Response:

Alva's Institute of Engineering & Technology (AIET) affiliated to Visvesvaraya Technological University (VTU) approved by AICTE functions under the governance of Alva's Education Foundation ® (AEF) Moodbidri, which has been serving as a trust registered under The Indian Trust Act- 1882. AIET was established in the year 2008 under the leadership of Chairman, Dr. M Mohan Alva. The Principal is the head of the institute for both academic and administrative affairs.

Academic & administrative setup

The institutional setup for Academic & Administrative functioning is as follows:

§ Governing Council

- Internal Quality Assurance Cell (IQAC)
 - Finance Officer
 - Supporting staff
 - Purchase Officer
 - Supporting staff
 - Human Resource Office
 - Supporting staff
 - Deans
 - Head of departments
 - Teaching staffs
 - Non-Teaching staffs
 - Administrative Officer
 - Academic & Examination section
 - Scholarship section
 - HR section
 - Accounts section
 - Site Engineer
 - Stationery & stores
 - SWOs & Hostel staff
 - Campus Supervisor
 - Plumber
 - Electrician
 - Housekeeping
 - Gardening staff
 - IT Administrator
 - IT Technician
 - Security staff
 - Supporting staff
 - Training & Placement Head

- Supporting staff
- Chief Librarian
 - Supporting staff
- Physical Director
 - Coaches
- Prevention of Sexual Harassment Cell (PoSH)
- Anti-Ragging Cell
- Grievance Redressal Cell (GRC)
- Women Empowerment Cell
- Entrepreneur Development Cell (EDC)
- Finance and Purchase Committee
- SC & ST Cell
- Counselling Centre
 - Counsellors
- Club coordinators
 - Members
- Student Council

Recruitment, service rules, promotional policies, and procedures

As per the service rule, the employees of the institute are recruited according to the policy and mechanism developed for the recruitment. The recruitments are made against sanctioned posts as approved by the GC. The role of employees is clearly mentioned in the service rules set by the Institute. The career advancement of an employee based on the performance are done as per the policy of Promotion framed by the Institute. The IQAC ensures recruitment of teaching and non-teaching staff of the Institute is carried out effectively and efficiently as visible from the institutional policies.

File Description	Document
Upload any additional information	<u>View Document</u>
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

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

6.3 Faculty Empowerment Strategies

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

Response:

Alva's institute of Engineering & Technology (AIET) is always committed in initiating welfare measures to its teaching and non- teaching staffs. The institution always believes that innovation & creativity is an outcome depends on satisfaction and wellness of its employees. The institute has taken welfare measures in academic & research areas, leave, finance and certain special permission etc.

Welfare measures for teaching and non-teaching staff:

Responsibility allowance: Additional allowance for HoDs, Deans, Placement head & leads and EMS coordinator etc. are given by the institute.

Maternity leaves: Maternity leaves are given to staff as per prevailing rules and regulations (*see Page 30*; section 51.8 of Service rule).

Privileged leaves: Earned leaves (EL) are given to staff as per prevailing rules and regulations of the Institute (*see Page 27-28*; *section 51.4 of Service rule*).

Casual leaves: Casual leaves are given to staff as per prevailing rules and regulations of the Institute (see Page 27; section 51.2 of Service rule).

Semester End Vacation: Teaching staffs are given with semester end vacation as per norms (see Page 28; section 51.5 of Service rule).

Fee concession: The children of staffs are partially supported by giving a concession in tuition fee, studying in AEF group of institution.

Sponsorship for higher studies: Faculty members pursuing higher education leading to enhancement of quality are sponsored in terms of finance & leaves.

Research Incentives:

• A special allowance such as academic & research allowance are given to faculty with PhD.

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• Principal Investigator of any funded project are entitled for 10% of research grant received as research incentive according to the institution policy (see Page 48 section 1.3 of Service rule document).

Sponsorship for knowledge up-gradation: Faculty members are sponsored for attending FDP, workshops, seminar, and conferences. The registration fee amount and TA/DA is provided by the institute.

Provident fund (PF) & ESI: PF and ESI for teaching & non-teaching staff as per provisions of the Government of India.

Fil	le Description	Document
Uŗ	bload any additional information	View Document

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

Response: 22.88

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
36	27	13	54	36

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

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

Response: 11

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

2020-21	2019-20	2018-19	2017-18	2016-17
07	10	12	15	11

File Description	Document
Upload any additional information	View Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

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

Response: 54.98

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

2020-21	2019-20	2018-19	2017-18	2016-17
44	75	37	94	166

File Description	Document
Upload any additional information	<u>View Document</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Details of teachers attending professional development programmes during the last five years	View Document

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

Response:

The Institute has developed robust performance management system through appraisals specifically designed for teaching & non-teaching staff considering academic and non-academic performances. The student feedback is considered as other dimension for the appraisal system.

Appraisal system for Teaching staff

Every year faculty members are mandated to fill the appraisal form and submit the same to HoD. The appraisal form comprises of following criteria,

- Students' performance in respective course handled by the faculty.
- Academic credentials, Experience (BOE, BOS, paper setting, teaching, Industry etc.)
- Contribution of individual faculty to the growth of
 - Department (Forum coordination, event organized, consultancy etc.)
 - Institute (Coordination of Institute/AEF level events/activities)
- Faculty's contribution to Innovation, Research & Developmental activities including seminars attended, paper presentations, attending workshops, FDPs, Guest talks, Research grants received etc.
- Student Feedback on the faculty (end of each semester)

Appraisal system for non-teaching staff

Non-teaching staff like the Office staff, Lab technicians & support staff are given an appraisal form comprising of following indicators such as *Professional competence*, *Performance*, *Personal Characteristics* and *rated on 5-point scale*. The personal appraisals are submitted to HoD/AO for evaluation and further evaluated by Principal.

Action plan:

- Principal shall discuss outcome of appraisal with faculty and staff whenever necessary, to provide constructive feedback of individuals, to give scope for improvement.
- Promoting and encouraging faculty to attend the faculty development programs (FDP) related to effective teaching methodologies.
- Based on their performance, faculty are given additional or special allowance/Promotion.

File Description	Document
Upload any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Alva's Institute of Engineering & Technology (AIET) has a well-established financial code and auditing system as per the statutory provisions of audit and accounting practices.

An effective financial management system is followed which ensures that no financial mismanagement takes place and utmost care is taken to follow the best accounting practices. As a part of financial management system Institute constituted two levels of audit namely,

1. **Internal audit** – by Institute's Governing Council (GC) appointed internal financial auditor M/s

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UMESH RAO & CO, Chartered Accountant, Moodbidri

2. **External Audit** - by Institute's GC appointed external financial auditor, M/s DEV KUMAR & CO, Chartered Accountant, Mangalore

OBJECTIVE OF THE AUDIT:

- •To conform financial & accounting transactions are done as per the accounting standards.
- •To locate the accounting discrepancies as Non-Conformity (NC) or audit objections.
- •To fulfill statutory requirements of the Trust act.

PROCESS:

Internal audit

The IQAC has set internal audit frequency to be **quarterly**. The IQAC chairman communicates a request for appointing an internal auditor to GC. The Principal (IQAC chairman) sends a requisition to GC for the conduction of quarterly audit to internal auditor. The GC appointed internal auditor conducts the audits and submits the report to the IQAC Chairman (Principal). During the audit if any discrepancies are reported as Non-Conformity (NC) or audit objections. The Principal reviews the internal audit report with the Accounts/ Finance officer. The Accounts/ Finance Officer by the directions of the Principal will rectify the discrepancies identified during the audit and submits the compliance report to IQAC Chairman. Further the IQAC Chairman submits the compliance report against the audit objections raised during internal audit to GC.

External audit

The GC appointed external auditor conducts the audit of the Institute as per audit standards. The IQAC Chairman initiates the external audit process by sending a requisition for the same to GC. The internal audit report is shared with an external auditor. During the audit if any discrepancies are reported as Non-Conformity (NC) or audit objections, as a part of the process, these objections are discussed with the IQAC Chairman and FO. After due clarifications & rectifications, the accounts will be finalized and audited Income & Expenditure statements are reported along with the audit report. The audit report is filed in the Income-Tax Department.

INCOME & EXPENDITURES:

The details are available in the income and expenditure statement balance sheet

File Description		Document	
Upload any additional information		View Document	

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

Response: 36.88

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	4.58	0.60	0.20	31.50

File Description	Document	
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document	
Any additional information	View Document	
Annual statements of accounts	<u>View Document</u>	

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

Response:

Alva's Institute of Engineering & Technology (AIET) is a self-financed institution affiliated to Visvesvaraya Technological University (VTU) under AICTE. The major part of the funds required by the institution is being met out of internal generation from **fees collected from students**. Apart from the fund generated through fee, the institute also receives funds from other sources viz., Grants, Sponsorships, Consultancy, optimum utilization of existing resources etc. The IQAC monitors mobilization & optimal utilization of funds in an efficient and effective manner. The mobilized resources are utilized for infrastructural development of the Institute, Human resources, Research & Development and developing teaching learning process.

IQAC along with effective and efficient administration strategies promotes quality and innovative practices resulting in generation of additional revenue as follows:

- The Institute strategically plans for the optimum utilization of existing infrastructure and resources. Institute is recognized as Examination center for different competitive exams by the National Testing Agency (NTA) under MHRD. Following Entrance/ Recruitment exams viz., ACCA, JAIIB, IIBF, KVPY, UGC-NET, CAIIB, JEE, BEC, Pondicherry Entrance Exam, CDAC, MTS, SSLR, NEET PG, KPTCL, SSB, CMAT/GPAT & MESCOM are conducted to generate the revenue.
- Institute is one of the implementation agencies for Government of India's Pradhan Mantri

Kaushal Vikas Yojana (**PMKVY**) skill development scheme. Institute conducts allotted skill development trades under PMKVY using existing assets & infrastructure as prescribed by **National Skill Development Council** (**NSDC**).

Institute extends expertise for third party verification of Government Projects as a part of **Consultancy**. Further, research facilities are extended to other institutes on a pay-per-use basis.

File Description	Document
Upload any additional information	<u>View Document</u>

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

IQAC of the AIET is committed to provide quality in all facets of campus activity by using suitable strategies for quality achievement & enhancement. IQAC has evolved through numerous methodologies to meet the stakeholders' requirements. It draws strategies through Curricular aspects, Teaching-Learning process, Research practices, Community oriented services, HR management, Industry interaction, Placements, Infrastructure Facilities, learning resources, Student Support Progression, Governance, Entrepreneurship, Leadership & Management operations activities. IQAC has mechanisms for ensuring implementation of all the policies, review and evaluation.

Best Practice -1

Experiential learning initiatives through MOU's & Academic collaborations

IQAC is instrumental in signing various MoU's with institutions, industries, corporate houses etc. during the last five years and as a result, various collaborative activities are taken up for the benefit of the students & faculty

Realizing the importance of Internships, AIET has mandated to undergo 30-45 days of the internship program. Besides optimal utilization of institutional setup, the institute ensures strengthening of research culture through collaborations, and Internship programs every year. Further IQAC encourages to take up online/ offline certification programs to develop employability skill set beyond syllabus contents in various fields. The Institute offers certificate programs and add-on courses based on the stakeholder's interest to fill the curriculum gap between industry and academia.

Best practice 2: Ecosystem for innovations through Value added R& D labs

Institute has created an ecosystem for Innovation and Research. The institution has functional Research centers and Value-added Labs The institution makes all positive efforts to nurture innovation ecosystems and to cultivate research environment.

INNOVATION ECOSYSTEM

Research labs

VTU recognised research centres and value-added labs of the institute augment to the research ecosystem. The value added labs cater the students of the institute with experiential and participative learning pertaining to content beyond syllabus.

The value added labs are:

- Apple iOS Lab
- Innovation & We lab
- Envision lab
- MEMS Lab
- E-Yantra Robotics lab
- IC Engine lab
- Nano Organic Electronics & Earth's Field NMR lab
- Centre for Bio Based Product Development (Composite lab)
- ACAR (Alva's Centre for Advanced Research)
- CNC machinery lab
- Edwin's Linux Lab

As an outcome of the above efforts students and Faculties have come up with innovative projects and 8 Patent application files have been filed and published by faculties of the Institute.

File Description	Document	
Upload any additional information	<u>View Document</u>	

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Institute has set up an IQAC, and through it, has taken quality enhancement initiatives in the academic and administrative domains, which are successfully implemented during the last five years. IQAC's initiatives have led to incremental improvement in quality of the same. IQAC deploys plan—do—check—act cycle for continual quality improvement.

To enable transparent assessment, an online test conduction and evaluation platform (TechGig) is facilitated. Attainment of OBE is calculated as per National Board of Accreditation (NBA) guidelines based on summative and formative assessments as mandated by IQAC. NBA has accredited two of

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institute's programs to acknowledge best OBE practice of IQAC.

IQAC has led to significant improvement in Self-learning facility that is, in library. It is upgraded with RFID, OPAC, discussion room, and computers for accessing digital contents, Knimbus, NPTEL contents, Easylib software (ILMS) and increment in e-subscriptions has been ensued in last five years.

IQAC has been instrumental in establishing research centres, the numbers of the approved research centres have risen over the years. Research facilities across the programs of Institute have been increased over the years. The value-added labs are available 24X7 for students and are given flexible time slots to do additional experimental work with the assistance of qualified staff. These facilities have resulted in enhanced number of research indicators. For the advantage of students there has been an increase in the add-on and certificate courses provided to students, further there has been substantial improvement in the number of students benefited through scholarships. Further AIET has taken up setting up of installation of solar power and lifts.

Following table lists out the incremental improvements made during the preceding five years

Sl.no	Facility	2016-17	2017-18	2018-19	2019-20	2020-21
1.	Number of programs accredited by NBA	0	0	0	2	2
2.	Number of full time teachers with Ph.D	16	25	26	23	25
3.	Final year University Exam Results in percentage	92.58	94.77	98.91	97.25	95.11
4.	Number of Research Centers	4	5	6	6	6
5.	Grants received from KSCST for projects in lakhs	0.44	0.40	0.46	0.30	0.57
б.	Annual expenditure for purchase of e-journals year-wise(INR in Lakhs)	10.08	9.41	10.48	9.65	15.24
7.	No. of computers	771	884	884	911	912
8.	Number of students benefited by scholarships and freeships provided by the Institute		341	350	594	539

Incremental Growth in adding Infrastructure /equipment's made for the preceding five years is shown in the below table

Sl. No.	Facility	2016-17	2017-18	2018-19	2019-20	2020-2021
1.	Internet Speed	100Mbps	200Mbps	400Mbps	400+	1000+
					10Mbps	10Mbps
2.	Solar Power	r0MWp	0.99MWp	0.99MWp	0.99MWp	0.99MWp
	Station					
3.	Lift facility	No	No	No	Yes	Yes

File Description	Document
Upload any additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

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

Response: B. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

Alva's Institute of Engineering and Technology (AIET) aims at providing gender equity in the campus through following program to provide Safety and Security, counseling for needy, Facilitating infrastructures viz., Day-care center for children of employees, common rooms etc.

1.Safety and Security:

Institute has taken an initiative with the belief that the sense of security through safe environment provides conducive environment for teaching-learning of all the stakeholders.

- Electronic Surveillance systems in all prominent areas viz., Admin block, Classrooms, Corridors, Seminar halls, Auditoriums, Library, Cafeteria, Hostel premises etc. are installed to ensure safety in the campus.
- Campus is facilitated with good illumination.
- Security guards ensure safety through vigilance round the clock in and around campus and hostel (Boys and Girls block) premises.
- Transportation facility for girl students to commute between hostel and academic block is provided during regular class hours and beyond working hours.
- Students are mandated to hostel timings to facilitate their security. Visitors to hostel premises are mandated to make an entry in the log book.
- Wardens being custodians of student hostels, monitor students' activities and also support them for comfortable stay at the hostel.
- Student Welfare Officers (SWO) assist students as care-takers.
- Dedicated lady SWOs are available as care-taker to assist girl students.
- Students are mandated to follow uniform dress code with college ID to ensure security through their identity.
- Onsite dispensary with medical officer provides first aid medical needs for both students and staff.
- 24 x 7 transportation facility is provided to help needy to commute to Alva's Health Centre (AHC), Moodbidri in case of medical emergency.

2. Counseling:

The AIET provides necessary counseling facility for students on need basis. Institute's program BELAKU provides students, an access to professional counselors to needy. Institute has well-defined mentoring system to support students emotionally and academically to enhance their academic performance to achieve goals.

3. Common rooms:

Girls and boys common rooms are located in the appropriate places of the Academic blocks with facilities

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like-restroom, sanitary pad dispenser, incinerator, table, chair, bed, etc.

4. Day-care center for young children:

The employees of AIET can avail the Day-care Centre (CHERISH) for their children provided by Alva's Education Foundation (AEF).

5. Other Facilities and support system for gender sensitization:

- Activities promoted by Women Empowerment Cell viz., talks by Gynecologists on health and hygiene, Mental health by Psychologists, Career guidance by Women in Services, Motivational talk by Women Entrepreneurs and awareness programs under the scheme Beti Padhao and Beti Bachao.
- Training program on Self-defense for women.
- Prevention of Sexual Harassment Committee to address related issues.
- Celebration of International Women's Day, Poster Competitions, Dance and Drama.
- Yoga and Meditation programs for stress management.
- Women representation in academic/ administrative bodies of the institution.

All the above additional initiatives have made Gender equity an achievable endeavor at AIET.

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

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

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

Response: A. 4 or All of the above

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

7.1.3 Describe the facilities in the Institution for the management of the following types of

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degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

Solid waste management

Alva's Institute of Engineering and Technology (AIET) has keen concern on solid waste disposal and its management. The color coded Green, Blue and Yellow separate bins are provided in the appropriate places of campus to collect degradable, non-degradable and E- wastes separately. The blue dustbins are for dry waste, green are for wet waste and yellow for E-wastes. Non-degradable waste such as Plastics if any is separated from dry waste bins before disposal. The degradable waste is recycled by composting and the compost obtained is used for the gardens of AIET. The plastic waste is collected by an agency (A2 Associates) time to time. Presently, AIET has signed MoU with Gram Panchayat, Puthige, Moodbidri for non-degradable plastic waste management. The old newspapers, old books and old magazines from library are given for to external agency. The food waste generated in the Cafeteria and Hostels is separately handled and managed by an outsourced certified agency operating at Moodbidri. The institution strives to minimize the plastic use in the campus through proper awareness and by keeping caution boards at appropriate places.

Liquid waste management

The liquid waste generated in the campus includes effluents from Hostels and Academic blocks. The said effluent is chemically treated in the specially constructed tanks. The treatment consists of holding the sewage in a quiescent basin where heavy solids can settle to the bottom, while the liquid is discharged to another tank for chemical treatment. The treated water is then utilized for gardening in the campus of AIET and adjoining coconut farm land. AIET has entered into MoU with *M/s Sumitha Agro Mangalore*, a manure manufacturing company, which removes and handles the settled sludge from the tank periodically.

E-waste management

Electronic goods are put to optimum use; the repairs, if any, are done by the Technical Assistant in the campus and are reused for students' projects. AIET has entered into MoU with *M/s Cerebra Integrated Technologies Ltd*, *Bangalore and M/s Sogo Synergy Pvt. Ltd*, *Bangalore*, which collects the non-repairable e-wastes. The company assures that the E-waste does not end up in [a landfill.

Waste recycling system

1. The paper wastes viz., empty pages of old note books and Internal Assessment test books generated in the campus during the end of the every semester collected by *M/s Diya Impression, Gardadi, Belthangady* for producing re-bound books in two sizes (A4 and Long) and supplied back to AIET stationery. The re-bound books are sold to students for concession prices.

2. The chemically treated wastewater is re-used for gardening and agriculture purpose in the campus.

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

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

7.1.5 Green campus initiatives include:

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

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	<u>View Document</u>

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

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	<u>View Document</u>
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

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

Response:

Alva's Institute of Engineering and Technology (AIET) has created a conducive environment for nurturing values of tolerance and harmony towards various culture, region, language and diverse communities. The institute conducts programs viz.,

- 1. Alva's VIRASAT- flagship cultural integration event
- 2. Alva's NUDISIRI flagship regional literary festival
- 3. Traditional Day Event portraying unity in cultural diversity
- 4. Kannada Sangha and Tulu Sangha to promote local language (Tulu) and regional language (Kannada) and their culture.
- 5. Deepavali, Christmas & Ifthar Koota Celebration.
- 6. Independence day and Republic day Celebrations.
- **1. Alva's VIRASAT** *flagship cultural integration event* is held every January right from the year 2000, where AIET plays an important role in organizing and executing the event. VIRASAT comprises of classical music concerts and a variety of classical & folk dance performance. A number of artistes of national & international repute from different parts of India are invited to perform their talent.
- **2. Alva's NUDISIRI** flagship *regional literary festival* of Alva's Education Foundation (AEF) which is celebrated every year to showcase the regional literary talents. Staff and students of AIET take part in the event. The eminent scholars are invited to speak on the areas which are urgent and subtle. The celebration is clubbed with book exhibition, cultural activities, local folk enactments and the theatre performances.
- **3. Traditional day:** AIET is represented by student community of various states origin. Hence the traditional day at the institute is one of the most sorted event to portray cultural unity in diversity among students. Various state-wise representation of cultural events, form the core attraction of the Traditional day event. Events such as Mohini-Attam from Kerala, the Festival of Manipur "Ningol-Chakoba" and events of Manipuri origin viz., Maibi dance, Stick-dance, Dasa-avatar, Kabui dance and also Garba dance from Gujarat etc., set the tone of the traditional representation of respective region.
- **4. Kannada and Tulu Sangha**: Regular activities in the regional clubs of Kannada and Tulu Sangha at the institute furnishes platform to students to inculcate the linguistic values and useful spirits from the cultural practices of Karnataka to the present and future generation.
- **5. Deepavali, Christmas & Ifthar Koota Celebrations**: Institute celebrates Deepavali, Ifthar and Christmas illustrating the amicable environment towards various religions, thereby creating communal harmony. The Rostrum- speaker's club organizes events, where eminent speakers deliver lectures addressing various issues on Socio-economic, Environmental awareness etc. The activities viz., Blood donation, Tree plantation, and Environment cleanliness program etc. conducted by NSS to foster the same.
- 6. Independence day and Republic day Celebrations: Institute celebrates national festivals viz.,

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Independence day, Republic day under the Alva's Education Foundation (AEF), wherein over 18,000 students from 19 different institutes under AEF participate and showcase their national integrity. Army, Navy and Air Force wings of NCC take lead in organizing the parade, with the highest level of proficiency.

These events act like catalyst to enhance interpersonal skills, tolerance, social responsibility and essence of cultural and regional diversity thereby attributing for holistic development of students.

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

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

Response:

During beginning of every academic year, Alva's Institute of Engineering and Technology (AIET) organizes orientation sessions for employees (teaching and non-teaching staffs) on Constitution of India. The main objective of these sessions is to make the employees aware of the essence of our constitution. These sessions highlight the information viz., justice, liberty, equality, right to profession, right to education, directive principles, fundamental duties and responsibilities of citizens, human values and professional ethics.

As a part of the University curriculum, Constitution of India and Professional Ethics (CIPE) is taught as a credit course for the first/second year engineering and second year lateral entry students. Moreover, the course CIPE comprises of the topics such as, basic information about constitution, legal literacy, roles and responsibilities of an individual, professional and engineering ethics, and constitutional provisions, which will sensitize the students and shape them to become a responsible citizen of the nation.

Apart from these, a club named as *ROSTRUM* – *The Speakers Club* of AIET under AEF, is a platform created for sensitization of the students and staff about wide spectrum of topics such as Ethics, Roles and Responsibilities of Citizens, Moral Values and Life Skills. *ROSTRUM* brings in internationally renowned motivational speakers every year and conducts activities like motivational lectures, interactive sessions and panel discussion. Further, ROSTRUM aims at preparing students for professional world, giving much focus on ethics and values.

Every year institute celebrates Independence Day in association with AEF to remind about the sacrifices made by our freedom fighters. Celebration of Republic day in the institute under AEF reminds the values and objectives of constitution and also the contributions of architects of Indian constitution. During the above occasions, the eminent personalities viz., Armed force personnel, Civil administrative officials, Law enforcement officials deliberate on the importance of fundamental rights & duties, Human rights and directive principles of the constitution.

Institute emphasizes to inculcate cleanliness as prominent value in students through various programs attributing for building healthy society. In this regard the NSS unit organizes *SWACHH MIJAR* - a cleanliness program near the vicinity of campus under SWACHH BHARTH ABHIYAN and also organizes blood donation camp jointly with Youth Red Cross. These provide an opportunity to experience the impact of clean environment and health awareness making students responsible citizens.

The NCC unit of institute organizes beach cleaning programs and tree plantation drives to inculcate environment awareness and responsibilities of an individual.

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

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

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

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document
Code of ethics policy document	<u>View Document</u>
Any other relevant information	View Document

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

Response:

Alva's Institute of Engineering and Technology (AIET) celebrates National and International commemorative days, events and festivals with a view to promote patriotism, communal harmony, inclusiveness and spirit of unity in diversity. Institute celebrates national level commemorative days viz.,

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Independence Day, Republic Day, Teacher's Day and Engineer's Day. International commemorative day viz. Women's Day to commemorate the cultural, political, and socioeconomic achievements of women, and Water Day to advocate sustainable management of freshwater resources thereby conservation of water, are being celebrated by the Institute. Further, the institution also celebrates festivals like Deepavali, Christmas and Ifthar Koota to reflect communal harmony. These commemorative days and festivals are observed to nurture the spirit of nationalism, oneness, national integration and respect for the diversity.

Institute celebrates Independence Day on 15th August commemorating the nation's independence from the foreign rule. On this occasion eminent personalities are invited as guest of honor to motivate the youth assembled. Over 16,500 students and 2000 staff members from 19 different institutes including AIET under the Alva's Education Foundation (AEF) witness this national celebration. Institute also celebrates Republic Day on 26th January, commemorating the setting up of constitution of Republic of India and is carried out in the same tone and enthusiasm as other National festivals. During the celebration, the institute felicitates Ex-Service personnel to show our gratitude to their sacrifice in safeguarding the nation. The inspiring speech by Ex-Service personnel during the celebration instills the national integrity among the staff and students. Institute celebrates National level commemorative days viz., Teacher's Day - on 5th September to commemorate the birth anniversary of

Dr. Sarvepalli Radhakrishnan, an excellent teacher and the first Vice President of India, Engineer's Day on 15th September to commemorate the birth anniversary of Sir M. Vivesvaraya, a revolutionary engineer, the country had ever seen.

The institute organizes Water Day during the month of March every year in order to give awareness on importance of water and its conservation, pollution abatement etc. Technical talks by water experts are arranged on that day for the students.

Institute celebrates Kannada Rajyotsava on 1st November, a day which is celebrated across Karnataka by Kannadigas to commemorate the merging of all the Kannada language-speaking regions of India.

To promote communal harmony, inclusiveness and spirit of unity in diversity, the institute celebrate Deepavali (the festival of lights), Ifthar (to mark the end of Holy Ramadan fast), Christmas (commemorate the birth of Jesus Christ). People from all occupations, cultures and walks of life of the Institute come together to build a peaceful and harmonious relationship among different communities through celebration.

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

7.2 Best Practices

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

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Response:

Best Practice 1

1. Title of the Practice

AIET Social Outreach Program- *Societal connecting activities of the institute.*

2.Objectives:

Alva's Institute of Engineering and Technology (AIET) aspires to achieve the following objectives for students' overall development through Social volunteerism and Awareness programs connecting to local society through "AIET Social Outreach Program – Societal connecting activities of the institute."

- Create basic computer literacy among school students of rural areas.
- Inculcate human values through Volunteer services and Charity works.
- Generate awareness on Environment, health and sanitization among the local community.
- Promote traditional games of Cultural heritage among current generation.
- Connect technology for solving societal problems.

3.The Context:

AIET is committed to connect the students and technologies for betterment of society in order to address the issues in rural community, like- illiteracy in technology, lack of health and hygiene, lack of environmental awareness etc. Institute believes in instilling social responsibility among the students through various social outreach programs. The programs provide platform for the students to nurture their harmonious relations, rapport with the local community, environmental concerns, problem solving skills etc. These initiatives are led by students and executed through various clubs and forums. The salient initiatives viz., KALIYONA COMPUTER (Computer literacy program), Toilet Construction (Hygiene & Sanitization), AMSA and AGAMYA (Charity event), VARISTA KREEDAKOOTA (Traditional Games), KESARD ONJI DINA (technical interaction with farmers through monsoon games) and implementation of collaborative societal programs with ISRO, resulted in the good impact on local community.

4. The Practice:

Under AIET Social Outreach Program, following are practiced every year:

"KALIYONA COMPUTER" is a Computer awareness program for primary and high school students of rural area through hands on experience.

"AGAMYA - Donate for cause, not for applause" is a program organized to raise fund through events of sports and games for staff & students. Fund raised is donated to Orphanages and needy schools.

"Toilet Construction – Promoting Hygiene & Sanitization"- In this program, the students apply the concepts of design, construction of toilets for rural government schools. During this program the students

inculcate essential qualities such as leadership, team building, interpersonal skills etc.

- "Workshop on waste management" is a program for nearby rural community, where students render social service by creating awareness on "Pipe composting of biodegradable wastes" in the locality.
- "AMSA *Charity event*" –A fund raiser program to support old age homes and orphanages by conducting events like movie shows and food fest organized by students for the said cause.
- "VARISTA KREEDAKOOTA *Traditional rural sports/games meet*" is an event conducted by students showcasing traditional rural games of Karnataka for promoting cultural harmony.
- "KESARD ONJI DINA—Interaction with farmers through awareness of monsoon games" is an event during which students interact with local farmers and create technology awareness and play rural monsoon games with them.
- "CAMPAIGN ON DIGITAL PAYMENTS"- an awareness activity for local community on digital transaction using various apps like Google Pay, BHIM etc.
- "ENVIRONMENT AND HEALTH AWARENESS *Initiatives towards clean local environment*", under which NSS and NCC of the institute organize various activities on regular basis. Swachh Mijar (inspired by Swachh Bharath Abhiyan); a cleaning program initiated in the neighborhood village Mijar. The NSS also organizes blood donation camps regularly in the campus. NCC initiates Beach Cleaning activity through student volunteers as part of clean environment awareness.

Collaborative projects:

- "BHUVAN ISRO sponsored rural asset mapping program for Mangalore Taluk, Dakshina Kannada" which was a collaborative effort with Zilla Panchayath and district administration, wherein asset mapping and geo tagging were done by students.
- "NAVIC ISRO sponsored navigation project for fishermen" which was a collaborative implementation effort, to assist the fishermen in their navigation while in the deep sea.

5. Evidence of Success:

- **KALIYONA COMPUTER**, has been receiving positive response from students and has enhanced their knowledge of computers.
- The students comprehended the objective of Charity fund raising in positive manner and donated the fund to the organizations such as special schools, old-age homes and orphanages through AGAMYA & AMSA.
- VARISTA KREEDAKOOTA inculcated leadership qualities, tolerance, group work, interpersonal skill etc. TOILET CONSTRUCTION has helped the school children who were deprived of the proper toilet facility in the schools, especially girl students.
- **KESARD ONJI DINA** inculcates awareness of monsoon games of Cultural Heritage and uplifted the spirit of sportsmanship along with educating farmers with technology.
- WORKSHOP ON WASTE MANAGEMENT-The skill of converting waste into wealth using simple technique, which attributed to environmental sustainability was well accomplished.
- ENVIRONMENT AND HEALTH AWARENESS The NSS and NCC initiatives have ensured

completely clean neighborhood village Mijar and few beaches.

- **BHUVAN**, an asset mapping project in association with ISRO was successfully implemented to help the local administration of Mangalore taluk. In addition, students gained exposure to rural issues.
- The implementation of **NAVIC** project benefitted rural fishermen through usage of indigenous satellite navigation technology.

6. Problems Encountered and Resources required.

- Scheduling the social outreach programs considering the Academic calendar of the university (VTU) was quite challenging, due to the time constraint, hence only Sundays and holidays were utilized.
- Mobilizing the resources and convincing the local bodies for timely conduction of programs was a daunting task.

Best Practice 2:

1. Title of the Practice:

Alva's PRAGATI - Mega Open Placement drive

2. Objectives of the Practice

Alva's Institute of Engineering and Technology (AIET) associates with Alva's PRAGATI – *Mega Open Placement drive*, a one of a kind, cause driven placement initiative in the State, organized under the banner of Alva's Education Foundation (AEF). Alva's PRAGATI is committed to create job opportunities for Alva's students and rural youth of this region & other parts of the Karnataka.

Alva's PRAGATI an annual event since 2011 has following objectives,

- Connect employers with prospective employable candidates of rural area.
- To ensure whole hiring process is completely cost free for job seekers and employers.
- Fulfill aspirations of candidates through **fine-tuned career guidance**.

3. The Context

Current job market is unable to penetrate fully into rural pool of talents, to fulfill the employer's portfolios. Further, the youth job aspirants from rural area are deprived of updated information regarding employment markets. Hence there is a need for bridging this gap and bringing the employer and aspirants to a common platform. In this regard the AIET under AEF finds Alva's PRAGATI as an amicable solution where employers from IT, Automobile, Manufacturing, Banking, Finance, Insurance, Health & Pharmaceutical, Tourism and Social welfare, and job seekers, have a win-win situation. Aspirants with varied profile(s) viz., ITI, Diploma, UG & PG degree holders of all streams participate and get benefitted during Alva's PRAGATI -Mega Open Placement drive.

4. The Practice

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Alva's PRAGATI has attracted companies from various sectors mentioned above and students from in and around Karnataka to participate in this job fair.

The salient practices adopted to ensure effectiveness of Alva's PRAGATI considering both employees and employer are as follows,

- Companies visit drive, to ensure participation, job profile in demand and their requirement.
- The employer and job seekers are mandated to register online free of cost through mobile App. or logging on to Alva's PRAGATI portal.
- Alva's PRAGATI back-end office filters the profile of candidates and issues a color card unique to their eligible sector with registration number. This is done during the student registration process to segregate the aspirants based on their qualification and the same is done with requirements of the companies. This helps in saving the time of the aspirants on the day of the event and guides them to right employers.
- During the drive, Employability Enhancement Centre set up at the venue provides updated information to aspirants on best suitable employers available for their profile and guide them on selection process.
- The announcement center communicates about process of the placement drive to be followed.
- Employability Enhancement Centre adopts follow-up process with successful job aspirants to ensure that they join the company by specified joining date.

The meticulous planning involved in the drive is such that both participating company and job seekers get benefits, as described below:

Benefits for Participating Companies:

- An excellent opportunity to build brand image and recruit talented candidates for various job profiles in a single platform.
- Since the facilities to conduct the entire recruitment process are made available at one place (viz. interview rooms, group discussion rooms, online test facilities etc.,), the recruitment process would be hassle free, time saving and cost effective.
- Accommodation and logistics facilities to company officials are provided by organizers.

Benefits for job seekers:

- The multiple job openings in a single platform.
- Aspirants get good exposure to current job market with diversified sectors.
- The aspirant profiles are stored in data base and used for on-campus and off-campus drives for various job profiles in different sectors throughout the year.

5. Evidence of Success

Alva's PRAGATI model was recognized by the Government of Karnataka and designated to organize mega placement drives like Chikkaballapur UDYOGAMELA (2013 and 2018) and Mangalore UDYOGAMELA (2015, 2018). The following statistics depicts the success of Alva's PRAGATI.

Sl.	Name of the Event	Year	No. of	Location	Participat	Shortliste
No.			Company		ed Candid	d

			Participated		ates	
1	Alva's PRAGATI	2016-17	309	Vidyagiri, Moodbidri	15000	4744
2	Alva's PRAGATI	2017-18	208	Vidyagiri, Moodbidri	11000	2918
3	Disha Career Fest (Mangalore UDYOGAMELA)	2017-18	130	Mangalore University campus, Mangalore	6562	1718
4	Alva's PRAGATI	2018-19	183	Vidyagiri, Moodbidri	10000	3947
5	Chikkaballapur Udyoga Mela	2018-19	104	S J C Institute of Technology, Chikkaballapur	4542	1393
6	Alva's PRAGATI	2019-20	208	Vidyagiri, Moodbidri	8453	3697

The success of this mega job fair was quite evident through its benefits to participating companies and job seekers.

6. Problems Encountered and Resources required.

Alva's PRAGATI involves meticulous, macro and micro planning and execution. The following challenges were encountered during the implementation of the event-

- 1. Channelizing efficiently the job seekers to concerned employer.
- 2. Building large network of companies and aspirants for mega drive.
- 3. Building large network of potential recruiters from diverse sectors for mega drive.

7. Notes (Optional)

Alva's PRAGATI is one of a kind mega placement drive model that the educational organizations and University from across the country from rural regions should take up to increase the employment opportunities for the youth of their region.

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

7.3 Institutional Distinctiveness

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

Response:

COMPREHENSIVE HOLISTIC GROWTH ECOSYSTEM:

Introduction

The prime focus of the institution is to ensure the students get transformed into technically sound engineers with additional qualities of skills, human values, society & environmental concern. The institution strongly believes in holistic development of an individual as its thrust area of interest and in this regard is committed to put highest efforts and intends to stand distinct in the society. Further, the institution makes sure to provide all necessary infrastructure and conducive environment in the campus to support its priority. The institute ensures that right from beginning of first year to till the end of the final year; the students undergo multitude activities along with the regular University curriculum, which will help them for comprehensive growth.

Deployment

The institution has various active Clubs & Cells, Additional Labs (Value added labs), Facilities and adequate infrastructure for the purpose of achieving all around growth of students and for the deployment of its various initiatives, as indicated below-

Internal Quality Assurance Cell for monitoring academic activity, ICT enabled classrooms for improving teaching-learning experience, Value added labs like ENVISION lab, MEMS lab, INNOVATION & WE lab exclusively designated for project works and innovation, Training and Placement Cell for placement enhancement, NCC & NSS units, Culture & Sports clubs, Entrepreneur Development Cell, Speaker's Club (Rostrum), Nature Club (Sristi), Technical Clubs, Department level student forums, active MoUs with premiere organization such as ISRO, IIIT Allahabad, DIAT Pune, Toyota Kirloskar etc to support the students for internships, trainings and projects.

The institution meticulously plans for imparting knowledge, skill, values etc. under three major categories-*Technical Fundamentals*, *Skill Sets and Human values*. The following points elaborate the various activities involved in the each category.

1. Imparting Technical Fundamentals (to enhance knowledge base)

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- Regular Classroom Learning as per curriculum.
- Experiential Learning for minimizing industry-academia gap through Industry site visits, Internships, Technical Talks, Workshops, Certification Courses and Project works.
- Student patents, student participation in technical competitions/exhibitions/conferences in order to inculcate innovation and research.
- Learning through additional Labs (Value Added Labs) for contents beyond the syllabus.

2.Imparting Employability Skills (to enhance placement opportunities and quality of life)

- Company specific technical training to enhance placement opportunities which include- training for Aptitude tests, Interview skills and Soft skills.
- An exclusive, rigorous Skill Enhancement Training program (Boot Camp) is given to pre-final year students, which include- Physical & Mental fitness training, Yoga, Life skill training which covers Leadership quality, Professional Ethics, Team building, Endurance, Sportsmanship and Time management.
- Nurturing Communicative English, interpersonal skills and intra personal skills for students through Language lab.
- Orientation program (Agamana) for First Year students.
- Training for competitive exams and career guidance.
- Entrepreneurial Skill trainings are organized by EDC of the institute.

3. Human values (to enhance social & environmental concern)

- NSS, NCC, Rostrum Club (Speakers club), Sristi Club (Nature Club) regularly conduct various activities which promote Environment Awareness, Health and Hygiene awareness etc. Some of the noteworthy programs are- Cleaning of neighborhood village Mijar (Swachh Mijar), Beach cleaning, Blood donation camps, Life skill related talks by internationally renowned speakers etc.
- Social Outreach Programs initiated by the department level forums inculcate societal concern and volunteerism among students. Some of the major programs are Computer teaching for rural schools, Toilet construction for rural schools, Farmer interaction for technical awareness, Fund raising through Movie show and Food fest for charity purpose etc.
- Participation of students in various Cultural and Sports activities at institute level, regional level, inter University level and National level.

The impact

Over the past years, the various initiatives of the institute have played vital role in shaping the students into responsible and socially sensible engineers. It is quite evident through its reflection in the following-

- Good academic results.
- Healthy Placements records over the last few years.
- Paper presentation by students at conferences and publications in journals.
- Successful internships in reputed industries.
- Higher studies in Universities abroad.
- Student patents.
- Student entrepreneurs.
- Championships in Sports and Cultural activities.
- Participation of NCC cadet in Republic Day parade.

- University (VTU) ranks being secured.
- Accreditation of Department of Computer Science & Engineering and Department of Electronics & Communication Engineering by NBA for the duration 2019-2020 to 2021-2022.

Thus, the institution's efforts are supporting the student community for their comprehensive holistic growth and created good impact and stand distinct in the society.

File Description	Document
Link for any other relevant information	View Document
Link for appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information:

Alva's Institute of Engineering and Technology, Moodbidri intends to provide industry readiness traits to students through various Academic Collaborations/MoUs with Institutes and Industries viz., IIIT-Allahabad, Kumamoto University (Japan), Toyota-Kirloskar Motors (TKM), ISRO- NARL, NRSC, RRSC, SCL, ISRO HQ, NAL, DIAT, HAL, NHAI, EDII, which facilitates participative and experiential learning. Students of AIET have been visiting the Kumamoto University, Japan under academic exchange program (Sakura Exchange Program). Students have undergone 30-45 days real time hands-on training in the area of Advanced IC engines under MoU with TKM. Internship opportunities at ISRO have opened an avenue to students in upgrading their skills through national level projects viz., BHUVAN, NAVIC, Automatic Weather Station, GNSS etc. Faculties have also visited campuses at Kumamoto University, ISRO, IIIT-Allahabad, TKM for training programs, Workshops, Conferences etc.

Institute disseminates content beyond syllabus through several value-added labs viz., e-Yantra Robotics lab, Innovation & We lab, MEMs lab, Envision lab, iOS lab, CNC lab, ACAR lab, NOEL-EFNMR lab, Composite lab etc.

Institute focuses on strengthening skill-sets of students through rigorous Technical skill training, Soft-skill training and **Boot Camp** (an exclusive pre-placement training activity for students) at Training & Placement Cell (T&P cell) of AIET, which resulted in healthy placement records. Institute conducts **Alva's Pragati** - *One of a kind mega placement drive* at state level for rural talented youths creating good employment opportunities apart from students of AIET.

Institute's efforts in creating awareness programs (GRE, GATE, UPSC, SSC) on higher education, civil services, defense sector etc. has resulted in students pursuing higher studies in reputed universities, public sector jobs etc.

Institute has witnessed successful startups, enterprises started by students. Further institute was identified as skill training center under **PMKVY**, and successfully completed skill training under different domains.

Students' comprehensive holistic growth is achieved by societal oriented activities implemented through various clubs viz. **NCC**, **NSS**, **Speaker's club**, **Nature's club**, **Departmental forums** etc. The activities conducted by these clubs viz., Toilet construction to rural schools, Beach cleaning, Computer literacy to rural students, Blood donation camps etc. have shaped them as responsible citizens of the nation.

Concluding Remarks:

Alva's Institute of Engineering and Technology (AIET) stemmed out of Alva's Education Foundation (AEF)® in 2008, through entrepreneurial vision of Dr. M Mohan Alva, Chairman AEF, an educationalist and a social reformer in Moodbidri, Karnataka. AIET since its inception strives to meet the Vision through its Mission, thereby bringing excellence in transformative education to students through the collaborative efforts of its stake holders, Industry experts and various MoUs. The institution's governance structure is indicative of effective leadership and provides opportunities for involvement of stakeholders. IQAC regularly ensures Governance is transparent and in line with the institution's Vision and Mission.

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Institution has well established infrastructure facilities to create favorable environment for students to assimilate knowledge. The green initiative policy of AIET ensures effective waste management in the campus and usage of solar power.

The students learning abilities are indicators for effective implementation of teaching-learning strategies. Further institute encourages usage of ICT for teaching learning process. Institute practices **Outcome Based Education** rigorously, which has resulted in accreditation of two programs (**CSE & ECE**) by NBA.

Institute's efforts in disseminating content beyond syllabus through various value-added labs has rendered innovative learning methods. The Institute is committed to provide an excellent research ecosystem as per the Mission of the Institution. These initiatives have facilitated faculties to publish scientific results in reputed journals.

The institute has a robust student support system to ensure favorable academic environment and supports students stemming from various socio-economic backgrounds through Institutional Scholarships and free-ship. AIET has a strong mentor-mentee program for creating a well-defined student support system.

Effective training in sports and culture to the students by professionals has resulted in several accolades in University, Inter-University, Zonal and National levels. Institute is overall champion in VTU- Sports and Cultural fest for multiple years.

AIET aspires to be the most sought after technical institute of the region, with a highest grade in various accreditation bodies to support the institute to gain Autonomous Status. Further institute is gearing towards effective implementation of National Education Policy in near future.