SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

CHARUSAT CAMPUS, OFF. NADIAD-PETLAD HIGHWAY,
388421
www.charusat.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

July 2021

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

CHARUSAT has been established by promulgation of Gujarat Private Universities Act, 2009 vide notification No. GH/SH/24/GPU-2009-321- Kh [1]. It is empowered to confer degrees under section 22 of the UGC Act 1956.

CHARUSAT aims at bringing **higher and professional education** to the door-steps of rural students.

The journey started in 2000 with 1 Institute, 4 Undergraduate Programmes, 240 students, employee strength of 25, and an investment of Rs. 3 Crores. Gradually, it grew into a conglomerate, which was transformed into a University in July 2009. Presently, there are 6 Faculties, 9 Institutes, 4 Centres and 22 Cells offering 61 different Undergraduate, Postgraduate, and Doctoral Programs, student strength of 8100**,** 516 personnel and a capital outlay of 150 Crores.

All **Programs** are offered under the ambit of different Faculties. They are: Technology and Engineering, Pharmacy, Computer Science & Applications, Management Studies, Sciences and Medical Sciences. Faculty of Technology and Engineering has two Institutes catering to core and emerging specializations and Faculty of Medical Sciences has under it three institutes catering to the specialized fields of Physiotherapy, Nursing and Paramedical Sciences. Rest of the Faculties have one Institute each.

Some distinctions of CHARUSAT are:

§ First state university in Gujarat to be awarded "A" grade by NAAC in its first cycle

§ Rated in the band of Top 101-150 Universities in NIRF 2020.

§ P D Patel Institute of Applied Sciences at CHARUSAT is ranked 24th in NIRF 2020.

§ Four Institutes of CHARUSAT appear among the Top 3 Institutes in GSIRF 2021.

§ One of the few private Universities recognized as Scientific and Industrial Research Organization by DST.

§ First University in Gujarat to implement Paperless (Digital) Exam and has Cloud-Ready Infrastructure since 2009.

§ NABL accredited Laboratories

§ Schedule - I Environment Auditor by Gujarat Pollution Control Board

§ 3 Scientists from CHARUSAT appear in Top 2% Cited Scientists of the World as per the report by US-based Stanford University.

§ **Centre of Excellence** accorded in principle by Government of Gujarat

Importantly, CHARUSAT upholds a rich legacy of **High Moral Values** like Honesty, Integrity, Transparency and Social Responsibility

Vision

To become a dynamic global institution in a knowledge driven world through excellence in teaching, research and social contributions

Mission

To serve society by striving to transform it through creation, augmentation, dissemination and perpetuation of knowledge

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Governance with Mission of Social Service
- Organizational Culture supporting Research, Innovation and Academic Freedom
- Philanthropic support from across the world
- Fairness and equality in words and practice
- Financial Self-Sufficiency
- Active involvement and inputs of all the stakeholders in curricula design and development including industry professionals
- Wide variety of elective courses offered as Department Electives, Institute Electives, and University Electives
- Value added courses from humanities and liberal arts
- Add-on courses run under different academies for industry readiness.
- Endowment chair – lecture series for global exposure
- University support for student projects and research funding
- Advance Cloud-ready IT infrastructure and state-of-the-art facilities for learning and research
- Campus location in serene nature environs
- On campus Residence

Institutional Weakness

- Lesser presence of national and international students and faculty
- Partial say in the selection of students being admitted to the various programs
- Failure to attract highly qualified faculty due to the initial rural background of the University
- Record of scientific publications not up to high standards
- Resource constrains due to limited autonomy from Government

Institutional Opportunity

- Conducive, cooperative academic environment for overall growth of every individual
- Scope and freedom for the establishment and strengthening of teaching and research collaborations with research and academic institutes and industries
- Scope, support and freedom for innovations and creativity due to healthy management practices
- Scope and opportunities for inter-disciplinary and multi-disciplinary teaching and research
- Presence of several institutes of National repute in state
- Emergence of new information and communication Technologies which can facilitate networking
- New Education Policy of Government of India

Institutional Challenge

- Long-term sustainability without compromising standards due to horizontal growth in higher education
- Lack of societal readiness to adopt new, innovative programs
- Inculcation of commitment for scientific research among faculty and students
- Attracting and retaining very good faculty members

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Curricula, at CHARUSAT, emphasizes on preparing the students for global competitive environment through comprehensive guidance for **Higher Studies** and enhanced opportunities for **Placement** and **Entrepreneurship**. Thus, CHARUSAT strives to **make its students Job Creators and not Job Seekers**.

For the purpose, Curriculum and Pedagogy at CHARUSAT correspond with industry needs and aspire to reach International Standards. It is marked with **Outcome Based Education** and **Choice Based Credit System**. Programme Educational Outcomes (PEOs) and Programme Outcomes (POs) of different programmes have been aligned with the Vision and Mission of the University and the Institute.

The University has a systematic process of **curriculum design and development** wherein both internal and external stakeholders partake. Also the guidelines issued by regulatory bodies like AICTE, UGC, PCI, INC, GNC, etc are complied with. It focuses on experiential learning derived during Practical Sessions, Field Work and Live Projects, Industrial Training, and Hospital Training for different programs. At the same time, the curriculum of various programmes is benchmarked against global trends, emerging technologies, ethics, social values, self-development and prevalent industry practices.

CHARUSAT accentuates the **holistic integral development** of the students in the order of Personal, Social and Professional Development. Hence, the curriculum architecture consists of fundamental courses, core courses, value-based and add-on courses and advanced courses. In addition, there are elective courses as well. Elective Courses are offered as Department Electives, Institute Electives and University Electives for cross discipline experiences.

Students are provided with a **bouquet of Value-based socially relevant courses** to select from as per their requirement and choice. They include Ethics & Values, English Communication and Soft Skills, Personality Development, Foreign Language, Critical Thinking, Creativity & Innovation, Entrepreneurship, Performing Arts, Environmental Studies, etc. In addition to this, the ICT is an integral part of the curricula of all

programmes.

Importantly, **reviewing and upgrading the curriculum** is a continuous process. The institutes are in regular interaction with all the stakeholders, including industry experts and veteran academicians for systematic feedback on the contents of the curriculum, emerging areas and technologies, elective courses, updating laboratory practicals, exposure to professional / industrial practices, communication skills, etc.

Teaching-learning and Evaluation

CHARUSAT has become one of the choicest destinations for students seeking good opportunities for higher education. **Admission processes** are carried out **transparently** on merit and following the guidelines from AICTE / UGC / Govt. of Gujarat.

CHARUSAT practices **Choice Based Credit System (CBCS)** comprising Continuous Internal Evaluation (Formative Assessment) and University Level End Semester Evaluation (Summative Assessment) carried out by internal and external examiners. **Examination Reforms Committee** has been constituted to review and improvise the processes.

CHARUSAT believes in **student-centric learning approach**, which is evident through Commencement Celebration, Bridge Courses, Innovative Pedagogical Techniques, Project-based learning, live projects, MOOCs, Blue Book Application, online evaluation including Exam From Home (EFH), Session Plans in accordance with Academic Calendars, Student Feedback System, three-tier Student Wellness Program and Mentor-Mentee System.

Students are provided with opportunities to grow, lead and perform through Central Council (CC) activities and participation in competitions at national / international events held within or outside the University.

Enhanced learning opportunities are provided through projects, internships, industrial visits, Endowment Chairs (Each of INR 25 Lakhs), and expert sessions. Moreover, Students can submit their innovative ideas to **CHARUSAT Startup and Innovation Center** and receive funding for the same from the University. 12 out of 22 programs have a component of a project or dissertation from the internship. Since 2014, the University has utilized about INR 65 Lakhs towards UG and PG projects.

The intellectual capital is the backbone of effective teaching, research, and mentoring. Out of 391 faculty members, 150 have Ph. D. degrees, while 237 have Master degrees. All the faculty are recruited by direct selection based strictly on merit. Ad hoc appointments or contractual appointments are made in lieu of faculty deputations and vacancies. Also, there is a provision to invite a person of eminence as Adjunct Professor.

The University has a customized mechanism of **performance appraisal system** for all its employees based on UGC guidelines. Moreover, each faculty member is encouraged to undertake research in the area of interest and also acknowledged during Annual Day and Foundation Day Celebrations.

Research, Innovations and Extension

CHARUSAT envisages growing in the field of research, consultancy and extension. University has **Research Council (RC)** to guide and **University Research Cell** (URC) to carry research activities in Institutes and

Departments.

Research is encouraged by:

1) Ph. D and Post-Doctoral Programs

2) Laboratories for Testing and Research

3) Financial assistance to teachers, scholars and students

4) Research Paper Awards

5) Conferences, workshops along with other events and activities fostering research

6) Promoting consultancy

7) Centers like R & D Centre, Space Research and Technology Centre, Startup and Innovation Centre, University – Industry Interaction Cell, and International Centre of Cosmology (ICC)

8) University Research Journal

In the last five years, 174 Research Scholars have been awarded with Ph. D. degrees, 201 are pursuing their doctoral research along with 8 registered for Post-Doctoral research under 178 supervisors.

CHARUSAT houses 240 Labs for Research, Consultancy and Testing and has collaborated with 70 reputed organizations, institutes and universities through MoUs.

During the last five years, seed money grant was given to 73 teachers for Innovative projects worth INR 130 Lacs. **CHARUSAT Startup and Innovation Center** has supported 90 start-ups and more than 1780 students benefitted through various initiatives.

30 projects worth INR 7.27 Crore have successfully been executed at CHARUSAT in addition to 82 industrial consultancy projects of INR 1.8 Crores. 460 research-oriented events were organized. Further, around 300 Research students from institutes like IIT, BITS etc. undergone specialized courses at ICC.

Policy for Patent filing and Royalty sharing has led to the Publication of 12 patents and 2 royalty agreements. Paper publications in SCOPUS indexed journal stands at 901, Web of Science at 463 and UGC-Listed at 195. 299 Book Chapters, 56 Books, and 299 research papers are published in conference proceedings. Thus, there are 1352 publications during the period of 2016 to 2020.

CHARUSAT has 3 researchers appearing in top 2% most-quoted scientists of the world.

The social and moral responsibilities of University towards society has initiated CHARUSAT Rural Education Development Program (CREDP) with several activities in the surrounding areas

Infrastructure and Learning Resources

CHARUSAT has a sprawling 120 acres of aesthetically designed lush green campus offering **environment conducive to learning**.

Institutional buildings have open wide spaces in between. There is **University Administrative Enclave** housing central library and exam section, a gymnasium, hostels (for girls), staff quarter, a bank with ATM, Post Office, a student store, canteens, dining halls, and food courts, etc.

All buildings are provided with modern amenities like laboratories, **24X7 Wi-Fi enabled** high bandwidth, enriched libraries, ICT enabled class rooms / interactive theatres, auditoriums, seminar halls, conference rooms, computer centers, open spaces in natural settings enhancing the horizons of innovative thinking.

The Library, the key academic facility, includes a wide range of reference books and text books including e-books and a variety of journals accessible in online mode and print mode. CHARUSAT has Institutional **Membership of DELNET, IIM-A, AMA, British Council Library, and AIMA**. The library has a more than 95000 books, 1412 Rare books, 11000 e-journals, 350+ Course Packs from IIM, 250+ Case studies from HBR, IIMs, among other resources.

The campus has 2 Playgrounds for outdoor sports and facilities for Indoor games, too. Multi Gym facilities are also available for students. **Five auditoria** and three open air theatres are also made available for various student centric activities. Four Girls' Hostels with a housing capacity of 1100 girls are on campus. Boys' Hostels are within a radius of 1 km with a capacity for housing 1200 Boys.

Multispecialty NABH Accredited CHARUSAT Hospital is functional with a capacity of 150 beds at present.

The Campus has comprehensive e-Governance system and Cloud Ready Environment since 2009. A dedicated Cell has been created to look after the IT Services, maintenance and its Management. CHARUSAT cloud ready environment is configured to match with the latest IT scenario and about 103 virtual servers presently deliver the IT service to internal as well as external users.

CHARUSAT turned to Wi-Fi in 2006. More than 3600 computers on the campus are connected to central LAN. CHARUSAT has enrolled for Microsoft Academic Subscription for proprietary utilization of all Microsoft Software.

Student Support and Progression

CHARUSAT believes in equal opportunities and there exists a cell for the same which carries out activities of personal, social and professional development.

CHARUSAT has **3-tier Student Wellness Program** (SWP) for students' Academic, Social and Personal matters affecting their career and life. A faculty Mentor is assigned to a group of students. The mentor counsels the students and also attends to their academic matters. Eventually, students with serious social issues and psychological disturbances are counselled by a consultant Psychologist. The process involves discussions with parents and their counselling as well.

The University has an institutionalized mechanism for students' placement. Comprehensive efforts include **guidance for Higher Studies**, opportunities for **Placement** and **Entrepreneurship**. Each institute also has similar cells to coordinate the activities. During the assessment period, about 300 recruiting companies have

visited the campus resulting in encouraging placements. **Charusat Startup and Innovation Centre** motivates the students for entrepreneurship. From 2016-20, 93 university level events were organized for the benefit of 7797 students through 270 Resource Persons.

For holistic integral development of the students, ample opportunities are provided through annual **extra-curricular and co-curricular** events. Financial and technical support is also extended.

During the assessment period, 14065 Students have been given scholarships of Rs. 44.43 Crores including the Government and other NGO Scholarships. Also the efforts of students are appreciated. As a result, students have excelled in a variety of events. Significant among them are the participations in Republic Day Camp consecutively for three years and **Gold Medal** for the **Award of Best Cadet** by the Governor of Gujarat. It also includes students' visits to Bangladesh and Russia under the **NCC Youth Exchange Program**, **National Championship in Karate** and participation in National Games and Delhi National Games.

CHARUSAT is a **Ragging free zone** including any untoward incidences of sexual harassment with the *Anti-Ragging Committee* and *Cell for Prevention of Sexual Harassment*. **The Grievance Redressal cell** takes necessary steps to resolve such matters.

CHARUSAT has a Central Council with student representatives from each of the constituent institutes. The university involves students in many academic and nonacademic bodies / committees.

Governance, Leadership and Management

CHARUSAT espouses **values of honesty, integrity, transparency and social responsibility**. It has well documented vision plan delineating *academic and research excellence, community development and financial self-sufficiency*.

CHARUSAT grooms **leadership** by providing autonomy in functioning related to academic, managerial and financial processes to the employees and also by providing training on developing leadership competencies.

To guide and lead the development, different Boards are formed. **Governing Body** (GB) and **Board of Management** (BoM) are the apex bodies that lead CHARUSAT to achieve higher standards. GB meets every 3 months whereas BoM after every 2 Months.

To help GB and BoM discharge their vital duties effectively, various boards and councils like Academic Council, Research Council, Faculty Boards, and Boards of Studies are also formed. In addition, Advisory Boards are formed for institutes and centres of CHARUSAT.

For different functions and purposes, specific committees like Finance, HR, Purchase for Equipments, Purchase for Furniture, Library, Exam Reforms are formed. **Internal Quality Assurance Cell** (IQAC) has also been established as a vehicle for quality enhancement on the campus.

For safety and well-being, there also exists a *Grievance redressal Cell, Cell for Prevention of Sexual Harassment (CPSH)* and *Anti-ragging Committee* (ARC). The grievance, if any, is addressed immediately. However, no such cases have been registered till now.

Importantly, **Organizational Structure**, at CHARUSAT, is a mix of Uniformity and Diversity making it hub

and spoke with representation of all in Governance. Unique practice is the **open-door policy** and 24*7 availability of executives without any prior appointments.

A two-tier system is adopted for the management of financial resources with appreciable autonomy to the institutes. Effective and efficient usage of Financial Resources is ensured through Budget and Quarterly Account Statements. It results into the finalization of accounts by 8th of April every year. The same accounts form an integral part of various reports sent to concerned stakeholders. The Reports are also made available on University Website. Thus, through its commitment to societal development, honest efforts and transparent functioning, CHARUSAT has won the faith of philanthropists from across the world wishing to contribute to the development.

Institutional Values and Best Practices

CHARUSAT makes efforts in providing an inclusive environment to students irrespective of their identity or learning preferences feel supported intellectually as well as academically. CHARUSAT ensures the intermingling of the students of various backgrounds starting from the very first year of their graduation program by celebrating their **commencement**.

University offers foreign language courses, elective courses on **Creativity, Problem Solving and Innovation** and **Liberal Arts**.

University has a very effective **Mentor-mentee system**. All the entering students are allotted a faculty counsellor who guide the students time to time for academic as well as non-academic development.

Students are encouraged to work with the local communities of the adopted villages by CHARUSAT Rural Education Development Program (**CREDP**). University students voluntarily conduct classes for rural children at the university campus after college hours.

CHARUSAT has always encouraged innovations in teaching and developmental activities; and has boldly allowed the practice of innovative ideas. Research projects at UG and PG levels, offering variety of enrichment and elective courses, Summer Research Fellowship Program, Emphasis on applied research and industry projects has been some initiatives in this direction.

On outbreak of Covid '19, we have taken the decision of **no fee hike** for the A.Y. 2020-2021. At CHARUSAT, Initiated **Exam from Home** and **Digital Paperless Exams**, Free **Online Whtsapp Clinic**. CHARUSAT **NSS Volunteers** provided their selfless services with dedication and educated people about social distancing and along with Govt. officials they helped people get acquainted with Arogya Setu App. Also it ended substantial financial help to all the needy students.

The Campus has developed e-governance system for Management of University operations through Cloud Ready Environment since 2009.

Human Resource Development Centre looks after training needs and mentoring of young faculty by experienced super-annulated faculties from other institutes/ Universities.

Establishment of CHARUSAT Space Technology and Research Centre (**CSTRC**) and Dr. K C Patel Research and Development Centre (**KRADLE**) hold some of the innovations designed, implemented and practiced.

The University endeavors to face the challenges of the future with the cognizance of its own strengths, opportunities ahead and a mindful assessment of its weaknesses.

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2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University	
Name	CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY
Address	CHARUSAT Campus, Off. Nadiad-Petlad Highway,
City	Changa
State	Gujarat
Pin	388421
Website	www.charusat.ac.in

Contacts for Communication					
Designation	**Name**	**Telephone with STD Code**	**Mobile**	**Fax**	**Email**
Vice Chancellor	Pankaj Joshi	02697-265037	9825303420	02697-265007	provost@charusat.ac.in
IQAC / CIQA coordinator	Mayur Sutaria	02697-265001	9426371641	-	coordinator.iqac@charusat.ac.in

Nature of University	
Nature of University	State University

Type of University	
Type of University	Unitary

Establishment Details	
Establishment Date of the University	24-07-2009
Status Prior to Establishment,If applicable	Affiliated College
Establishment Date	28-01-2000

Recognition Details		
Date of Recognition as a University by UGC or Any Other National Agency :		
Under Section	**Date**	**View Document**
2f of UGC	09-01-2020	<u>View Document</u>
12B of UGC		

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location, Area and Activity of Campus							
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**	**Program mes Offered**	**Date of Establishment**	**Date of Recognition by UGC/MHRD**
Main campus	CHARU SAT Campus , Off. N adiad-Petlad Highwa y,	Rural	120	169257.4	Diploma, UG, PG, PG Diploma and PhD		

2.2 ACADEMIC INFORMATION

Affiliated Institutions to the University

Type of Colleges	Permanent	Temporary	Total

Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	9
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	9
Colleges with Research Departments	9
University Recognized Research Institutes/Centers	4

Is the University Offering any Programmes Recognised by any Statutory Regulatory Authority (SRA)	: Yes

SRA program	Document
AICTE	103178_6213_1_1618309604.pdf
PCI	103178_6213_6_1618290003.pdf
INC	103178_6213_7_1622287548.pdf

Details Of Teaching & Non-Teaching Staff Of University

	Teaching Faculty											
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				52				93				316
Recruited	33	3	0	36	28	11	0	39	189	127	0	316
Yet to Recruit				16				54				0
On Contract	0	0	0	0	0	0	0	0	0	0	0	0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned				123
Recruited	100	16	0	116
Yet to Recruit				7
On Contract	0	0	0	0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned				87
Recruited	73	11	0	84
Yet to Recruit				3
On Contract	0	0	0	0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	33	3	0	28	11	0	54	21	0	150
M.Phil.	0	0	0	0	0	0	2	2	0	4
PG	0	0	0	0	0	0	133	104	0	237

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

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

Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	0	0	0	0
Adjunct Professor	2	3	0	5
Visiting Professor	14	7	0	21

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	Faculty of Technology and Engineering	Anita D Patel Endowment Fund	Anita D Patel
2	Faculty of Technology and Engineering	Aartiben Mohitbhai Dave Endowment Fund	Aartiben Mohitbhai Patel
3	Faculty of Technology and Engineering	Ekta Krunal Patel Endowment Fund	Ekta Krunal Patel
4	Faculty of Technology and Engineering	Shri Rajendra B Patel Mechanical Eng Chair	Shri Rajendra B Patel
5	Faculty of Computer Science and Applications	Shri M I Patel Computer Enginnering Chair	Shri M I Patel
6	Faculty of Managemnt Studies	Endowment Fund Faculty of Management Studies	Mahesh Haribhai Patel Jayesh Praful Patel Anita D Patel Devangbhai R Patel Rajen B Shah
7	Faculty of Management Studies	Anil and Asha Patel Endowment Fund for Creativity Course	Dr Anil and Dr Asha Patel
8	Faculty of Sciences	Pramukhswami Endowment Chair	Shri P D Patel and family
9	Faculty of Medical Sciences	Ashok and Rita Patel Endowment Fund for Physiotherapy	Mr. Ashok C Patel

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

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	4521	38	29	0	4588
	Female	2284	48	10	0	2342
	Others	0	0	0	0	0
PG	Male	498	9	0	0	507
	Female	556	15	1	0	572
	Others	0	0	0	0	0
PG Diploma recognised by statutory authority including university	Male	12	2	0	0	14
	Female	24	0	0	0	24
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	22	7	0	0	29
	Female	41	3	0	0	44
	Others	0	0	0	0	0
Diploma	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	No

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	Nill
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

Accreditation Details

Cycle Info	Accreditation	Grade	CGPA	Upload Peer Team Report
Cycle 1	Accreditation	A	3.11	Naac Peer Team Report Cycle-1_compressed.pdf

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Faculty Of Management Studies	View Document
Faculty Of Medical Sciences	View Document
Faculty Of Pharmacy	View Document
Faculty Of Sciences	View Document
Faculty Of Technology And Engineering	View Document
Faculy Of Computer Science And Applications	View Document

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
53	53	46	45	39

File Description	Document
Institutional data in prescribed format	[View Document]

1.2

Number of departments offering academic programmes

Response: 6

2 Students

2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
7237	6971	6494	6288	5987

File Description	Document
Institutional data in prescribed format	[View Document]

2.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
1860	1959	1883	1854	1694

File Description	Document
Institutional data in prescribed format	[View Document]

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2.3

Number of students appeared in the University examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
7186	6900	6466	6185	5892

File Description	Document
Institutional data in prescribed format	View Document

2.4

Number of revaluation applications year-wise during the last 5 years

2019-20	2018-19	2017-18	2016-17	2015-16
275	402	405	413	202

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1329	1326	1188	1063	908

File Description	Document
Institutional data in prescribed format	View Document

3.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
364	370	360	362	360

File Description	Document
Institutional data in prescribed format	View Document

3.3

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
397	384	401	391	373

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

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
135612	96759	79395	86421	96970

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

4.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
700	700	665	641	551

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

4.3

Total number of classrooms and seminar halls

Response: 141

4.4

Total number of computers in the campus for academic purpose

Response: 3513

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4.5

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

2019-20	2018-19	2017-18	2016-17	2015-16
6213.36	5151.78	5259.83	4928.82	4774.79

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4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

Charotar University of Science and Technology (CHARUSAT) is a non-affiliating, ever-expanding unitary university; provides the ambient environment conducive to learning. Identifying the diverse needs of the students and to cater to the various sections of the society, CHARUSAT has six faculties under its ambit. These include Faculty of Technology and Engineering, Faculty of Pharmacy, Faculty of Computer Science & Applications, Faculty of Management Studies, Faculty of Sciences and Faculty of Medical Sciences.

The curricula of various programmes are developed by adopting a well-defined procedure comprising of societal needs, the feedback from stakeholders, stipulation of various regulatory bodies e.g., UGC, AICTE, PCI, INC, GSCPT and competencies of aspiring graduates considering the prospective opportunities as well as the government policies e.g., Make in India, Start-Up India etc.

The vision and mission of the university has relevance to the local, national and global needs which are reflected in program outcomes and course outcomes. The POs of programmes are mapped with United Nations' sustainability goals. The syllabi of the courses have course outcomes (COs) which represent the expectations from the students after completion of the course. These outcomes are concise, meaningful and tangible. COs are aligned with minimum one Programme Outcome (PO), which facilitates the mapping. The COs are specific, measurable, achievable, time bound and realistic. The university has identified the dynamic competencies and adopted the graduate attributes in the line of vision and mission so that the graduates should possess the knowledge and skills in accordance with the industry requirements, prevailing needs of the research in the priority areas. Helping students to realize their potential as the entrepreneur is also being emphasized in curricula at CHARUSAT. The curriculum is focused to empower the graduates in solving the societal issues and serving the nation.

CHARUSAT aims at training students in their core domain along with the emphasis on holistic development. The major thrust for all the activities at CHARUSAT is to provide excellent human resources for various fields of Sciences, Technology, Management as well as Medical and Paramedical Sciences, who would be sensitive, progressive and concerned citizens of the society. Faculty of Pharmacy has adopted Pharmaceutical Ethics as one of the POs while Physiotherapy institute has adopted Evidence Based Practice along with Professional Responsibility and Commitment as one of the POs suggesting the desire of the institutes to imbibe the culture of professional ethics and accountability in the graduates. Faculty of Technology and Engineering has adopted Problem Analysis, Modern Tool Usage and Engineering for Society as the POs showing the inclination of Faculty to instill the ability to identify the technical challenges of all levels and capability of suggesting the solutions. Ability to communicate effectively is one of the vital components of the life and it has been placed as one of the POs by all the institutes.

Summarily, CHARUSAT while developing and transacting its curricula focuses on the needs of society from local to global level. Accordingly, it prepares its graduates to serve society through domain knowledge, leadership skills and value orientation.

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

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 **How many Programmes were revised out of total number of Programmes offered during the last five years**

Response: 53

1.1.2.2 **Number of all Programmes offered by the institution during the last five years.**

Response: 53

File Description	Document
Minutes of relevant Academic Council/BOS meeting	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Details of Programme syllabus revision in last 5 years	[View Document](#)
Any additional information	[View Document](#)

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 95.51

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1276	1267	1132	1017	863

01-11-2021 11:51:20

File Description	Document
Programme/ Curriculum/ Syllabus of the courses	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 48.53

1.2.1.1 **How many new courses were introduced within the last five years.**

Response: 824

1.2.1.2 **Number of courses offered by the institution across all programmes during the last five years.**

Response: 1698

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

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

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

Response: 53

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

1.3 Curriculum Enrichment

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

Response:

CHARUSAT has designed curricula for all the programs in line with the current national and international practices. The curriculum of all the programmes is student-centric, augurs well for self-learning and motivation for enquiry and integrates with contemporary cross cutting issues. It encourages the students to work coherently and collaboratively towards sustainable development goals. The courses incorporated in curricula, with relevance to human values, environmental sustainability and contemporary global issues, support the holistic development of the learners. The curricula consist of courses entitled Philosophy for Life, Society, Governance & International Studies, Human Values and Professional Ethics, Contributory Personality Development, Introduction to Law and Justice in India, Pharmaceutical Jurisprudence, Advocacy in Physiotherapy, Ethics in Research, Creativity Problem Solving and Innovation, Environmental Sciences, Organizational Behaviors. The core components of these courses are directly linked with crosscutting issues relevant to Human Values, Professional Ethics and Environment and Sustainability into Curriculum.

Course on environmental sciences focuses on waste segregation, disposal and management, sewage water treatment, plastic recycling, parsimonious consumption of natural resources and awareness of safer renewable energy sources. The course embraces understanding of the global environmental issues, concepts of global citizenship and multiculturalism. A course entitled Sustainable developmental goals (SDG) Hand print lab offered at CHARUSAT in collaboration with Centre for Environment Education, challenges the students to understand the goals and targets in a selected geographic area and think of solutions and Handprint actions that could lead to achieving the goals.

CHARUSAT supports non-discriminative environment at all platforms for its stakeholders. To bolster this ideology, the university runs various cells including Women Development Cell (WDC), Equal Opportunity Cell (EOC), Cell for Prevention of Sexual Harassment (CPSH). The context of gender equality is taught under the courses entitled Values and Ethics, Organization Behaviors and the concept is consolidated by organizing various workshops under women development cell and equal opportunity cell.

Professional ethics are not only inculcated through courses but CHARUSAT itself practices it and give opportunity to students to practice it. For example, honesty is taught through allocating them through sponsorship money, accounting it transparently and handling honestly. Fairness and equity is inculcated through forming cross departmental teams calling upon student to practice them. Plagiarism check and acknowledging others' work appropriately in academic writing is taught to inculcate professional ethics in

academic and research activities.

In view of social development activities, the students are encouraged to work with NGOs, organize blood donation camps, health check-up camps, health and hygiene workshops, environment awareness camps. Industrial Visit and Internships are incorporated into the curriculum to make students aware about challenges to be faced in the practice. The students are also engaged in value added programs organized by National Service Scheme (NSS) to sensitize them about societal responsibilities and contributing in supporting local community. CHARUSAT runs Entrepreneurship Development and Incubation Cell (EDIC) to develop successful entrepreneurs who can contribute to nation building through creativity, problem solving and innovation for the growth and development of society at large.

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

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 74

1.3.2.1 **How many new value-added courses are added within the last five years.**

Response: 74

File Description	Document
Institutional data in prescribed format	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 22.39

1.3.3.1 **Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
1449	2139	1911	1204	757

1.3.4 Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year).

Response: 60.83

1.3.4.1 **Number of students undertaking field projects or research projects or internships.**

Response: 4402

File Description	Document
List of Programmes and number of students undertaking field projects research projects/ / internships (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: D. Any 1 of the above

File Description	Document
URL for stakeholder feedback report	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Action taken report of the University on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	[View Document](#)

1.4.2 Feedback processes of the institution may be classified as follows:

Response: E. Feedback not collected

File Description	Document
URL for feedback report	[View Document](#)
Institutional data in prescribed format	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Demand Ratio (Average of last five years)

Response: 39.7

2.1.1.1 **Number of seats available year wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
2690	2683	2514	2362	2212

File Description	Document
Demand Ratio (Average of Last five years) based on Data Template upload the document	[View Document]()
• Any additional information	[View Document]()

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

Response: 56.75

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

2019-20	2018-19	2017-18	2016-17	2015-16
405	332	344	403	352

File Description	Document
Average percentage of seats filled against seats reserved (Data Template)	[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

01-11-2021 11:51:25

Response:

Every student has special ability, skill and competencies which help them to excel in their career path. With this belief, the slow learners are identified as Easy Paced Learners (EPL) and advanced learners as Fast Paced Learners (FPL). CHARUSAT adopts the following mechanism to identify & organizes special program for EPLs and FPLs:

1. Mechanism adopted to identify EPL and FPL:

- Entry Level Competency Test
- Admission Rank
- Counselling Session
- Performance in examinations

A specialized test is arranged for first semester students to identify their competencies in various areas. The result of the test provides the opportunity to counsel the student in the favorable direction. The rank of the student in merit suggests academic orientation which becomes an additional component for competency test. CHARUSAT has established an intensive and robust student counselling system. Students are assigned to a faculty mentor who considering the feedback received, counsel the students.

2. Special programs organized for advanced and slow learners.

Following activities are conducted for advanced learners

- Choice Based Credit System is implemented. The students can opt for interdisciplinary courses.
- Summer Research Programme
- Organizing the sessions by experts
- Incorporating projects in curriculum
- Encouragement to participate in conferences and seminars to present the papers
- Guiding career planning by training and placement officer
- Encouraging students to take part in competitive examination
- Conducting classes for competitive examinations
- Scope for add-on courses
- Arranging workshops and seminar on advance topic/technology
- Organizing Aptitude preparation sessions
- Financial assistance to attend scientific events
- Felicitation of achievers during annual day function

Following activities are conducted for slow learners

- Remedial classes
- Individual academic counselling
- Conduction of internal improvement test
- Counselling by Psychologist to the needy students

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

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

Response: 20:1

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

2.3 Teaching- Learning Process

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

Response:

CHARUSAT has adopted outcome-based education approach and student-centric methodology in teaching - learning process. Three principal approaches experiential learning, participatory learning and problem solving methodologies are extensively used as pedagogical tools. The faculty members have adopted the following strategies to facilitate the learning more students-centric and ensure the holistic development of the students:

Experiential Learning

Experiential learning is the learning through experience. The students at CHARUSAT are offered opportunities to carry out experiments and various activities. The students need to work on the assigned practical which translate the theory in applications. Industrial training is a mandatory component in curriculum of most of the programmes. Students are expected to work on projects under the supervision of faculty members. Students are encouraged and supported to take up the industrial projects, too. These approaches translate the classroom knowledge into the practice. Industry visit is a part of the education, during which students visit companies and get insight into the internal working environment of the company. It also sensitizes students to the practical challenges that organizations face in the business world. The students learn new skills, problem solving capacities, time management and analytical skills. Apart from curricular aspects, there is a scope of participating in summer research programme too. The institutes at CHARUSAT are engaged in consultancy and funded research projects. Students are also involved in these projects and get exposure of contemporary issues and training to solve them.

Participatory Learning

Participatory learning actively involves the students and motivates them to learn by doing and solve the problems of contemporary issues. At CHARUSAT, students are engaged in various types of participatory learning pedagogy like group discussions, workshops, assignments, local chapter of MOOCs (e.g. SWAYAM, NPTEL), hackathon etc. This enhances learning of students in sync withParticipatory Learning. Group projectsprovide an opportunity for the students to learn with their peers, encourage team

work and also improve their self-confidence. Online learning is one of the greatest revolutions in the digital education system. It has made a huge change in the system and opened great opportunities for everyone who wants to learn something very innovative. Students from Faculty of Medical Sciences are posted at various hospitals to learn by observation and examination of patients, interaction with patients, participating in patient care, assisting in procedures. Role play, community visits, clinical education, and simulation laboratory are routinely used as part of the pedagogy.

Problem Solving Methodologies

Students at CHARUSAT learn by working on local or regional problems, enables them to analyze the situation and prepare the appropriate solution. The students are expected to observe, understand, analyze, and find solutions those lead to a holistic understanding of the concept. Case-studies from management and administration, Patient based Case-studies, Comprehensive design problems, Industrial applications and Software projects, Research problems and Solutions, Pharmacotherapy-based Case-studies are various problem-solving methodologies used in various institutes. A dedicated course on Creativity, Innovation and Problem solving is offered to all the students.

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

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

CHARUSAT, being a science and technology university, follows intensive use of the ICT enabled tools in addition to the traditional classroom education. Efforts have been taken by the university to provide e-learning environment in the classroom. Classrooms and laboratories are fully furnished with the **multimedia projectors, digital interactive boards, writing pads** as well as the campus is enabled with the **1150 MBPS internet connection.** At CHARUSAT, use of LMS has been made mandatory for teachers

CHARUSAT has following ICT enable tools:

1. To promote resource sharing CHARUSAT's library has **DELNET**.
2. Collaborative resources (**Microsoft Teams, Edmodo, Google Classrooms**) are used to post learning material, quizzes, lab submissions, evaluations, assignments, etc.
3. **Virtual labs** are used to conduct laboratory sessions through simulations.
4. CHARUSAT has established **Media lab facility** is used to create video lectures and upload in appropriate platforms for students.
5. **Online quizzes and polls** are conducted to record student's feedback.
6. Teachers have their own **YouTube channels** that provides a modern, accessible, and intuitive interface that captivates both teachers and students.
7. Teachers have created **Blogs** and they are updating it with new contents from time to time.
8. CHARUSAT has an excellent collection of both print and electronic books, journals, technical reports, back volumes etc. and provide access to the collection through the **OPAC**.

9. With the help of **LMS (Microsoft Teams, Edmodo, Google Classrooms)** and blended learning, faculty members organize eLearning content in a location providing unlimited access to eLearning materials. At the beginning of semester teachers plan the Curriculum hence students remain aware about course transaction. Academic planning, sharing of resource materials, course transaction pedagogy, etc. are also shared through these platforms at the beginning of the semester. For this teachers are provided with a comprehensive training and their innovative ICT usage practices forms part of the performance appraisal.

10. **License of Video conferencing software like zoom,** is purchased by the CHARUSAT.

11. Learning through MOOCs like NPTEL, Udemy, Coursera is promoted. CHARUSAT has purchased the license of NPTEL and has its' **NPTEL** Local chapter as an addendum to the LMS, CHARUSAT has Received **"AA" Grade, "AAA" Grade, "A" Grade in the year of 2017,2018 and 2019 respectively.** NPTEL Local Chapter, CHARUSAT has received **Grant of Rs. 1,80,000 /-** for Workshop on NPTEL. CHARUSAT had organized the awareness workshop on NPTEL in association with IIT-Madras.

12. CHARUSAT had tied up with **Coursera** to offer the advanced courses to the teachers and students of the CHARUSAT. The no. of enrollments has been pretty good with 1036 course completions. Learners have shown a huge appetite and propensity through very heartening feedback comments.

Well prepared ICT infrastructure and well-trained faculty enabled smooth transition to obtain teaching during the pandemic.

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

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

Response: 21:1

2.3.3.1 **Number of mentors**

Response: 345

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

Response: 93.38

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	
List of the faculty members authenticated by the Head of HEI	
Any additional information	

2.4.2 Average percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. year-wise during the last five years

Response: 27.71

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

2019-20	2018-19	2017-18	2016-17	2015-16
150	118	101	77	58

File Description	Document
List of number of full time teachers with Ph D/D M/M Ch/D N B Superspeciality/DSc/D Lit and number of full time teachers for 5 years	
Any additional information	

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: 6.9

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

Response: 2513

File Description	Document
List of Teachers including their PAN, designation, dept and experience details	
Any additional information	

01-11-2021 11:51:27

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years

Response: 50.39

2.4.4.1 **Number of full time teachers receiving awards from state /national /international level from Government/Govt. recognized bodies year wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
80	20	42	24	17

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters (scanned or soft copy)	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 15.07

2.5.1.1 **Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
14.88	15.25	15.42	14.9	14.92

File Description	Document
List of Programmes and date of last semester and date of declaration of results	[View Document](#)
Any additional information	[View Document](#)

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 5.17

2.5.2.1 **Number of complaints/grievances about evaluation year wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
265	404	415	403	200

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

Response:

Evaluation of the students and gradual progression of students in terms of their academic merit is a crucial aspect of the teaching-learning process. The examination reform committee comprising of all the Deans, HoD's and Principals of the Institutes of the University. The key office bearers, the Registrar and the Provost preside over the meeting and decide over crucial matters related to the processes of the Examination. The committee meets two times a year once during the odd and even semester. The Minutes are circulated of comments and suggestions and is confirmed if there are comments. All Deans, HoD's and Principals gives their review and feedback on University examination.

IT Integration

The university has been continuously carrying out reforms in its examination procedure through integration of IT in all the procedures and processes of the examination systems. Examination related tasks are carried out through IT software called e-Governance. This result into the faster and effective examination system.

Continuous Internal Assessment

Internal evaluation done by the course convener based on continuous assessment. For theory component, continuous evaluation is normally done by taking Unit Test, Assignment, Presentation, Case Study etc. Sessional examination conducted at Institute level. For practical component, continuous evaluation is normally done checking performance of practical in each lab, followed by practical exam and viva-voce.

End-Semester Assessment

End semester examination conducted by the university through mode such as; written paper or practical test or oral test or presentation by the student or a combination of any two or more of these. For theory component, the method – normal written examination- is being followed by the department as a part of end semester examination as usually prevailed by most of the teaching to measure the course skills of the students. For practical examination, task based examination is being followed by viva-voce. Students have

to secure minimum marks as decided and passed in Board of Study in end semester examination to pass in every course. For

Some of the Key Exam Reforms

- To increase the accountability of the evaluation process and improving the transparency in the evaluation, University introduce "Know Your Answer Book" in which students can personally verify their answer book in presence of their Parents, Course Convener, Dean of the Faculty and provost nominee.
- In years 2019-20, CHARUSAT became first university in Gujarat to introduce Digital Paperless Examination as a part of examination reform programme. In collaboration with Ppyrus Little More Innovation Labs, CHARUSAT successfully conducted the examination of first year students using PEXA software. Drawing of question paper and evaluation process carried out through same software. The students are provided E-Tablets in which hall ticket are provided along with question paper. The students write the answer both descriptive and multiple choice questions (MCQs) using the same E-Tablet.
- To provide more scope to final year students for their placement and higher studies, CHARUSAT examination section timely published the result and issuing necessary certificates to students.

File Description	Document
Year wise number of applications, students and revaluation cases	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

2.5.4 Status of automation of Examination division along with approved Examination Manual

Response: 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	[View Document](#)
Current Manual of examination automation system	[View Document](#)
Any additional information	[View Document](#)
Annual reports of examination including the present status of automation	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Response:

Development:

CHARUSAT has adopted a system of tracking the teaching-learning mechanism by involving various elements of Outcome-Based Education (OBE) intricately in the curricula. The institutes and various departments have evolved the program outcomes (POs) of their respective programs and the course outcomes (Cos) for each course. The program educational objectives (PEOs) for the programs are also defined explicitly. In case of the Faculty of Technology, all departments have evolved their Program Specific Outcomes (PSOs) too. POs, COs, PEOs and PSOs are constituted by considering the expectation of regulatory bodies (i.e., AICTE, IEEE, UGC, PCI, GSCPT) and the stakeholders.

Dissemination:

The dissemination about the implementation of OBE system at CHARUSAT is carried out at host of platforms. The welcome booklet/handbook comprising of Vision-Mission statement of each respective institutes including POs, COs is prepared. These handbooks are provided to all the students during the induction or orientation sessions. It is also maintained in the institute library whilst the same is assessable from the website for ready reference. The examination system adopted at the institute is also described in this handbook along with relevant calculations for the conversion of marks to grades and from the grade points to SGPA/CGPA. The POs and PEOs are also displayed on the university website which can be publicly accessed by all the stakeholders. Vision- Mission statement and PEOs are displayed at various places in the institute for direct access to the visitors, students and other stakeholders.

Implementation:

The common practice of discussing the COs and the scope of each course, with the students at the end of each unit of the study, is adopted by the faculty members. The elements of learning/instructional objectives for the content to be delivered are identified based on Bloom's Taxonomy and specify the hierarchical level for each objective formulated on cognitive, effective and psychomotor domain and clearly described the knowledge skills and competency expected from the students to acquire as a result of completing their program of study.

The strategy of the preparation and submission of lesson planning and course content analysis, before commencement of every semester, by respective subject coordinator is well adopted at CHARUSAT. The students are also made aware of such practices during their tutorial meetings and counselling sessions. Cos of all courses are mapped with their respective POs in fastidious manner. The question papers are also drawn carefully to evolve the attainments of Cos, moreover attainment of POs is critically exercised and reviewed.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	**View Document**
Paste link for Additional Information	**View Document**

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

Response:

CHARUSAT has aligned teaching-learning methodology with the outcome based education (OBE) approach. Attainment of Program Outcome (POs), Program Specific Outcome (PSOs), and Course Outcome (COs) constitute the integral part of teaching-learning process at the institutes. The attainments are also indicative of the effectiveness of academic activities.

Step 1: Defining Program Outcomes (PO) and Program Specific Outcomes (PSO)

POs and PSOs of the program are evolved by considering the vision and mission of the university and the institutes. PSOs are formulated by considering the characteristic and deliverables of the programs.

Step 2: Defining Target level of each POs and PSOs

Department defines target level of each POs and PSOs on the scale of 0-3.

Step 3: Defining Course Outcomes

The Course Outcomes are drafted by considering the action verbs of learning level suggested by Bloom and Anderson. Training is conducted at regular interval to train faculty members to draft COs. The Cos are specific, measurable, attainable, realistic and time bound.

Step 4: Preparing Course Articulation matrix which/ maps each course with appropriate POs and PSOs.

The correlation between COs and POs & PSOs are established in the scale of 0-3, where 0 being not applicable, 1 being slight (low), 2 being moderate (medium) and 3 being substantial (High). Course Articulation Matrix shows the educational relationship (Level of Learning achieved) between Course Outcomes and Program Outcomes for a Course.

Step 5: Evaluation of the Course Outcome is based upon data collection through following exemplary assessment.

1. By analyzing the student's performance in Internal and University examination.
2. By analyzing the student's performance in Practical Examination.
3. By analyzing the student's performance during presentation in seminar.
4. Through collecting student feedback at the end of the course transaction.

Step 6: Attainment of COs

The attainment levels are set for all the courses of respective programs. Attainment is measured in terms of actual percentage of students getting set percentage of marks. Attainment levels along with percentage range of students scoring more than set (target) value are presented in following table.

Table1: Attainment level

Level	1	50% student scored above 60%
Level	2	60% student scored above 60%
Level	3	70% student scored above 60%

Step 7: Analysis and action taken based on calculated attainment level and targeted attainment level.

Total attainments of particular program for all POs or PSOs are calculated from course wise attainment in all the faculties across CHARUSAT. After analyzing the attainment of POs or PSOs, action is sought for further improvement, if needed.

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

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 99.73

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

Response: 1855

2.6.3.2 **Total number of final year students who appeared for the examination conducted by the Institution.**

Response: 1860

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination	[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: 3.58

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

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

CHARUSAT aims at fostering an outstanding research environment with highest standards of professionalism, integrity and ethical conduct. CHARUSAT believes in an environment of academic freedom, where *scholars and teachers* can pursue research in their areas of interest. Therefore, all "researchers" under the auspices of CHARUSAT including academic faculty, research personnel, research scholars, bachelor and master students, visiting research fellows and research collaborators are expected to adhere with following policy:

- Researchers should work for frontier areas of their domain and come out with original research work.
- Researchers are expected to develop, execute and disseminate their research results in reputed, SCOPUS and Web of Science indexed journals publications   and endeavor to obtain patents/security for the inventions   and innovations wherever applicable (assurance through plagiarism checks).
- Researchers are expected to apply for grants to national and international funding agencies, private foundations, industries or other sources to seek support for their research endeavors.
- Researchers (teachers of CHARUSAT) should balance their research endeavors in addition to other obligations of their job such as teaching, consultancy and administrative duties.
- Research endeavors are required for the career advancement of the teachers of University adding to university's vision to be a global institution of excellence in higher education and research.

The following policies are implemented at CHARUSAT for research promotion:

Research Projects Funding and consultancy

CHARUSAT encourages and supports its researchers to undertake sponsored research and consultancy projects from external funding agencies. The university provides   specialized administrative, institutional and infrastructural support for the same. **University has unique policy to support 30% of equipment grant for every sanctioned projects.**

Seed Research Grant

University provides seed grants to motivate the its researchers. The seed grant is given up to Rs. 5 lac. Based on the nature of the research project will be increased.

Fellowship for Doctoral and Post-doctoral students

To promote exemplary research in the fields of science & technology, CHARUSAT has initiated Doctoral Fellowship to the meritorious students for the period of Three years. The PhD scholars who have cleared

National level qualifying tests are encouraged by special scholarships and annual funding. The PDF programme intends to promote time bound focused research work, which fits into the CHARUSAT research mandate. The fellowship amounts are at par with institutes of national repute.

Fellowship to UG and PG students

University offers assistance for internal as well external for summer training/mini-projects/dissertation projects conducted within its constituent institutions. Bachelors and Masters Students can enroll under respective faculties for mini-projects/dissertation only in the final semester and for summer training during the vacation period of any semester.

Other policies for effective and smooth felicitation are:

- IP-policy
- Research Paper awards
- Endowment chair Professors
- Student research Project funding
- Institutional Ethic Committee

Infrastructural support for research and focused endeavors are extended through Dedicated Research Centers, including:

- *Dr. K C Patel R & D Center*
- *CHARUSAT Space research Center*
- *NABL accredited labs for Oil & Environment*
- *International Center for Cosmology*
- *Center of excellence in AI*
- *Supercomputing facilities*

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	[View Document](#)
Any additional information	[View Document](#)
URL of Policy document on promotion of research uploaded on website	[View Document](#)

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 26

3.1.2.1 **The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).**

2019-20	2018-19	2017-18	2016-17	2015-16
101.32	8.65	1.00	2.97	16.06

File Description	Document
Minutes of the relevant bodies of the University	[View Document]
Institutional data in prescribed format	[View Document]
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	[View Document]
Any additional information	[View Document]

3.1.3 Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 1.87

3.1.3.1 **The number of teachers who received national / international fellowship / financial support by various agencies for advanced studies / research year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
6	3	5	10	10

File Description	Document
Institutional data in prescribed format	[View Document]
e-copies of the award letters of the teachers	[View Document]

3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the last five years.

Response: 55

3.1.4.1 **The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
17	8	12	11	7

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

3.1.5 Institution has the following facilities to support research

      1.Central Instrumentation Centre
      2.Animal House/Green House
      3. Museum
      4.Media laboratory/Studios
      5.Business Lab
      6.Research/Statistical Databases
      7.Mootcourt
      8.Theatre
      9.Art Gallery

Response: A. 4 or more of the above

File Description	Document
Upload the list of facilities provided by the university and their year of establishment	[View Document]
Upload any additional information	[View Document]
Paste link of videos and geotagged photographs	[View Document]

3.1.6 Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies (Data for the latest completed academic year)

Response: 100

3.1.6.1 **The Number of departments with UGC-SAP, CAS, DST-FIST , DBT, ICSSR and other similar recognitions by national and international agencies.**

Response: 6

File Description	Document
Institutional data in prescribed format	[View Document]
e-version of departmental recognition award letters	[View Document]

3.2 Resource Mobilization for Research

3.2.1 Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).

Response: 81.92

3.2.1.1 **Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).**

2019-20	2018-19	2017-18	2016-17	2015-16
16.38	6.02	7.32	41.73	10.47

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the grant award letters for research projects sponsored by non-government	[View Document](#)
Any additional information	[View Document](#)

3.2.2 Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).

Response: 1066.33

3.2.2.1 **Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).**

2019-20	2018-19	2017-18	2016-17	2015-16
108.38	27.48	17.85	584.93	327.69

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the grant award letters for research projects sponsored by government	[View Document](#)

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

Response: 1.39

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

Response: 101

3.2.3.2 **Number of full time teachers worked in the institution year-wise during the last five years..**

Response: 364

File Description	Document
Supporting document from Funding Agency	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Paste Link for the funding agency website	[View Document](#)

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.

Response:

CHARUSAT aims to make its students **Job Creators and not Job Seekers.** In the context of the same, the University has established an eco-system for innovations including Incubation center and other initiatives for creation and transfer of knowledge named **Entrepreneurship Development and Incubation Cell (EDIC)** (2014).

It works with a vision to develop successful entrepreneurs who can contribute (to nation building) through creativity, problem-solving and innovation for the growth and development of society at large. EDIC aims to create an entrepreneurial ecosystem within CHARUSAT that acts as a catalyst in identifying, motivating and nurturing entrepreneurial talents; mentoring them towards sustainable pursuits through entrepreneurship awareness, education, training and research.

Entrepreneurship Developmental activities are being undertaken by faculty members trained at IIMA, University of Madras, EDI, University of Texas, USA and we also have access to renowned resource persons. For effective integration of entrepreneurship in all available disciplines within CHARUSAT, EDIC has identified *Faculty Entrepreneurship Champions (FEC)* from each department of the constituent departments / Institution through scientific tests.

From the year 2016-17 onwards, CHARUSAT-I2IM have received 31 projects (completed / ongoing) from **National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Govt. of India, New Delhi** - National Implementing and Monitoring

Agency for Training (NIMAT) through Entrepreneurship Development Institute of India (EDI), Gandhinagar, Gujarat to organize Entrepreneurship Awareness Camp (EAC - No.: 20), Entrepreneurship Development Programme (EDP - No.: 03), Technology Entrepreneurship Development Programme (TEDP – No.: 03), Women Entrepreneurship Development Programme (WEDP- No.: 02) and Faculty Development Programme (FDP - No.: 03) worth Rs. 30.5 lacs. A total of 1780+ Final Year students, 200+ Resource Persons from industry/ academia / start-ups have benefitted and contributed to its success which is rated 4.82 on a 5.00 Likert Scale.

Under the **Student Startup and Innovation Policy (SSIP)** initiated by **Gujarat Knowledge Society, Commissionerate of Technical Education, Govt. of Gujarat**, CHARUSAT EDIC has received / commitment for a grant of - Rs. 20 lakhs for next five years starting from 2017-18 onwards and the equal amount has been committed from CHARUSAT University. It has established *Student* Start-*up and Innovation Cell (SSIP Cell)* and *Intellectual Property & Research Cell (IPR Cell)*. Under this, Establishment of State of Art Tinkering and Fabrication Laboratories with facilities like IoT, Electronic Equipment, 3D Printer Tools & Kits, Internet of Things & Sensors, Robotic Equipment, Microcontroller Boards, Development Boards, Robotic / DIY Kits is established at CHARUSAT.

CHARUSAT EDIC has collaborated with The Centre for Entrepreneurship Development (CED) - Govt. of Gujarat (2016) and has started "Business Accelerator and Startup Cell" (BASC) which is nurturing ideas and jointly organizing various programmes like Entrepreneurship Development Programme (EDP) for different stakeholders of the society like for Differently Abled People.

With the help and support of the Government of Gujarat, CHARUSAT EDIC has established **CHARUSAT STARTUP AND INNOVATION CENTRE** on December 16, 2020.

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

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 464

3.3.2.1 **Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
185	86	70	54	69

File Description	Document
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)

3.3.3 Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

Response: 225

3.3.3.1 **Total number of awards / recognitions received for** *research /* **innovations won by institution / teachers / research scholars / students year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
123	57	26	9	10

File Description	Document
Institutional data in prescribed format	[View Document](#)
e- copies of award letters	[View Document](#)

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Code of ethics for Research document, Research Advisory committee and ethics committee constitution and list of members on these committees, software used for Plagiarism check, link to Website	[View Document](#)

3.4.2 The institution provides incentives to teachers who receive state, national and international recognitions/awards 1.Commendation and monetary incentive at a University function 2.Commendation and medal at a University function 3. Certificate of honor 4.Announcement in the Newsletter / website

Response: A.. All of the above

File Description	Document
Institutional data in prescribed format	View Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.4.3 Number of Patents published / awarded during the last five years.

Response: 12

3.4.3.1 **Total number of Patents published / awarded year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
2	2	2	0	6

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

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

Response: 0.92

3.4.4.1 **How many Ph.D's are awarded within last five years.**

Response: 164

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

Response: 178

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
URL to the research page on HEI web site	View Document

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

Response: 2.75

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

2019-20	2018-19	2017-18	2016-17	2015-16
256	201	262	136	142

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

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

Response: 0.98

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

2019-20	2018-19	2017-18	2016-17	2015-16
62	62	51	134	46

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

3.4.7 E-content is developed by teachers :

1. **For e-PG-Pathshala**
2. **For CEC (Under Graduate)**
3. **For SWAYAM**
4. **For other MOOCs platform**
5. **For NPTEL/NMEICT/any other Government Initiatives**
6. **For Institutional LMS**

Response: B. Any 4 of the above

File Description	Document
Institutional data in prescribed format	[View Document](#)
Give links or upload document of e-content developed	[View Document](#)

3.4.8 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response: 12.08

3.4.9 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response: 30.5

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.

Response:

Consultancy is an important activity for any organization imparting professional education like Charotar University of Science & Technology. Consultancy helps in multidirectional ways like:

1. Enriching academics as it generates case studies and real-time application examples.
2. Enhancing resource generation by way of addition of new Equipment's, software etc. and generating additional income.
3. Enhancing the image of the individual as well as the organization
4. Enhancing Industrial Interaction and thereby placements.
5. Bringing forth the importance of University to society.

CHARUSAT has identified Consultancy, as an activity to enhance academic excellence and to serve industry. This 'Third Mission' activity will enhance the interaction with industry and other business sectors for a higher education institute like CHARUSAT. As defined consultancy means, any intellectual work undertaken for an organization or individual requiring expertise in a field of specialization. It may be undertaken individually, departmentally or institutionally. Consulting will comprise of providing a solution to a problem, developing/ improving a process or a product, offering a coursework or part thereof in organizations other than University, developing curricula for establishing new courses etc. Based on these inputs CHARUSAT has divided the consultancy into three broad categories. These are;

1. Individual Consultancy **(IC)**
2. Departmental Consultancy **(DC)**
3. Institutional Consultancy. **(InsC)**

To encourage the researchers/faculties to involve in consultancy, CHARSUAT has liberalized its sharing

mechanism. As per the policy • 70 % to be distributed for Intellectual Inputs and 30% is with University.

The mechanism to enter into an agreement is as follows:

- Proposal submission
- Review and discussion in the presence of University authorities and Industry client
- Mutual agreement of terms and conditions
- Implementation

A designated University Industry Interaction Cell (UIIC) is established to facilitate collaboration amongst academicians, scientists, and industry. Academic staff is engaged in consulting, therefore the university has established a policy that deals with the issue must be undertaken before engaging in consulting. This will ensure that the academic community and the university are not subjected to financial and other risks, such as a conflict of interest. University derives invaluable benefits for consulting services, which can enhance the perception as well as enrichment of academic excellence for the benefit of society.

File Description	Document
Upload soft copy of the Consultancy Policy	[View Document](#)
Upload minutes of the Governing Council/ Syndicate/Board of Management related to consultancy policy	[View Document](#)
Paste URL of the consultancy policy document	[View Document](#)

3.5.2 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 167.1

3.5.2.1 **Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).**

2019-20	2018-19	2017-18	2016-17	2015-16
98.2	57.80	9.66	0.65	0.79

File Description	Document
Institutional data in prescribed format	[View Document](#)
Audited statements of accounts indicating the revenue generated through consultancy	[View Document](#)
Any additional information	[View Document](#)

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years.

Response:

CHARUSAT has been rendering yeoman service to the society with a view to make a desired impact on society and sensitise students towards the role of youth as responsible citizens in sustainable development through major activities like Health, Education and Nature Awareness Drives, Social Awareness Drives, Civic Awareness Drive and many more. Major activities carried out by various units are: self-defence workshops for females, Tree Plantation drive, Medical camps and surveys in an underprivileged area, Cloth Donation Campaign, dustbin installation and hand gloves distribution, Celebration/observation of national days including Independence Day- Republic Day- International Day of Yoga etc., celebration of Gandhi Jayanti, Sardar Jayanti, Literacy Day, Constitution Day etc. , Awareness Rally on Organ Donation, Blood Donation Camps, Youth parliaments , Run for Unity on National Unity Day and a Seven Day NSS Annual Camps etc in the adopted villages by CHARUSAT under its extension activities Unit: CREDP, NSS and UBA.

These activities aim at developing a sense of service, team spirit and dignity of labour in volunteers. The various programmes conducted have brought about a remarkable change in their outlook and their attitude towards life and society.

Through several initiatives CHARUSAT has been trying to sensitise the students towards their role for a sustainable society. Under *Health Awareness Drives* activities like Cleanliness Drive (In-Campus as well as in the vicinity of CHARUSAT) students have tried to participate and motivate people to join hands for Swatchh Bharat Abhiyaan. Health Awareness drive that focuses on personal hygiene, sanitation, menstrual hygiene have been fruitful in bringing a noticeable change in the attitude of people, rural students, vendors etc.

Under *Nature Awareness drives*, Volunteers have been involved in Tree Plantation on campus as well as at Schools, Public places, Temples, Government Offices in around 50 villages and have taken responsibility to nurture their growth. Volunteers have contributed in spreading awareness about importance of water, land and wild life around us. Trained volunteers have saved injured birds, animals and insects in nearby areas and treated them.

Educational Initiatives: Under Charusat Rural Education Development Program (CREDP)- an Education Support initiative of CHARUSAT, more than 80, 000 students, 1200 teachers, 500 parents and management of around 150 schools have been trained, counselled and guided through various educational initiatives. CREDP regularly organizes visits to Dinsha Patel Planetarium, Nadiad in order to spread the awareness of science.

Under *Social Awareness Drives* activities like street plays and Rallies on social issues have been organised as well as surveys have been conducted in adopted villages to realize actual problems and offer possible solutions. Through establishing *Wall of Kindness* on Campus as well as in adopted villages, attempts were made to sensitise people for humanitarian approach to fellow countrymen.

Under *Civic Awareness Drive* Attempts have been made to make students aware about role of citizens, elections process, democratic format and local and National Politics through activities like Youth Parliaments at CHARUSAT Campus as well as in other Universities.

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

3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years

Response: 5

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

2019-20	2018-19	2017-18	2016-17	2015-16
1	1	2	1	0

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copy of the award letters	[View Document](#)

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

Response: 554

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

2019-20	2018-19	2017-18	2016-17	2015-16
87	138	166	106	57

File Description	Document
Reports of the event organized	View Document
Institutional data in prescribed format	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 109.71

3.6.4.1 **Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
5794	11852	9928	5003	3952

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document

3.7 Collaboration

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

Response: 567.6

3.7.1.1 **Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
675	801	539	407	416

File Description	Document
Institutional data in prescribed format	View Document
Copies of collaboration	View Document

3.7.2 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 70

3.7.2.1 **Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
23	12	14	8	13

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the MoUs with institution/ industry	[View Document](#)
Any additional information	[View Document](#)

01-11-2021 11:51:42

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

CHARUSAT runs programs recognized by various statutory bodies established by both state and central government. The permissions of all these bodies are obtained every year and are in place. While granting permissions, these bodies look into the adequacy of infrastructural facilities, learning resources, staff and other amenities. Thus, CHARUSAT has adequate facilities for Teaching-Learning and research activities. The university has 151 classrooms including seminar halls equipped with air-conditioning. All classrooms are integrated with modern ICT facilities and designed to be flexible and adaptable to accommodate multiple learning styles and promote multiple pedagogical methods. The majority of the classrooms are designed to cluster around an open courtyard. This provides a sense of unity and cohesiveness important to the learners. Facilitating differently-abled individuals, the built environment of the university has been established with ramps /lifts for easy access to classrooms, disabled-friendly washrooms and accessible signages.

The university has established well-equipped laboratories with the core objective of imparting skill development, facilitating experiential learning to the students and providing an industrial environment among the students. Few major labs are listed below:

- SUPERCOMPUTER (PARAM SAVAK) granted by the Government of Gujarat for researching the field of AI, Machine Learning and Deep Learning.
- Super Micro Server for enhancing lab facilities in terms of computation
- SERB-DST/DBT laboratories with instruments including Thermal cyclers, RT-PCR, UV-visible spectrophotometers with dedicated software
- Pneumatics system, Hydraulic system and Modular production system with three MPS stations along with supportive instrumentation and software like Fluidism, CIROS, Mechatronics Assistance and Step-7 etc.
- Project Management Lab/Artificial Intelligence Lab
- Mobile and Internet of Things Research Lab.
- Robotics / UAV Research Lab/Virtual Reality / Augmented Reality Research Lab.
- Environmental Engineering Lab (NABL Accredited &GPCB Recognised)
- Thermal Imaging Camera (AICTE funded project under RPS)
- Modular Melting Setup (Smart foundry 2020-DST funded project)
- Hydro Climatology Research Lab/High Throughput magnetic fluid synthesis lab
- CHARUSAT Sophos Information Security & Research Lab.
- Human motion analysis and research lab
- Computer Assisted Learning Laboratory (CALL)
- Exercise and fitness testing laboratory
- Aseptic Laboratory, Cell culture Lab
- Animal house for preclinical Research
- Pharmacognosy Drug Museum and Herbal Garden
- Language Lab/Tinkering / Fabrication Lab/Nursing foundation lab / Research lab

B.I.C. Engines Lab facility is developed to assist Team Ojaswat, a student team of Mechanical & Electrical Engineering. The lab, with the core objective of imparting practical learning experience of students in automobile design, consists of all the analysis, manufacturing and testing facilities required along with necessary software like Ansys, Solid works etc. The team is involved in the design and analysis of a Formula 3 racing car, procurement of material & various parts and final assembly, off-road & on-road testing and finally participation at national level competitions like SAE India Supra and Formula Bharat.

There are more than 3500 computers and 1150 mbps internet connectivity available to staff and students. The Could ready infrastructure comprises 7 blade servers giving a computing power of 260 GHz, storage 76 TB and 1.3 TB memory space.

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

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

Response:

CHARUSAT has extensive facilities to promote sports and cultural activities among students. The university has two playgrounds with a total area of 32,434 square meter (sqm) and two gymnasiums (275+180 sqm) with modern fitness equipment. The playground includes a 30,544 sqm multipurpose ground for Cricket (15,400 sqm), Football (7,140 sqm), Handball (1,056 sqm), basketball (608sqm) and Athletics and (1,890 sqm) ground for Volleyball (360 sqm), Kabaddi (304 sqm) and Kho-Kho (620sqm). Another playground with a size of 10,652 sqm has been proposed for development in near future.

To promote cultural activities among students and staff the university has two Open-air theatres (2800+ 3000 square feet) and nine auditoriums (total capacity 1533 seats) located at its various constituent institutes. The majority of these facilities have been established since 2005 and more facilities were incrementally added during the past 15 years. These facilities were utilized for training, practice and inter and intra university competitions. Two major such events are described below:

SPOURAL: The University organizes a one-week long annual event "SPOURAL" to display the talents of students and give them a chance to explore their skills in extracurricular activities. Students participate in diversified off-stage and on-stage cultural activities and various indoor and outdoor sports completions. The event has been organized by the university's student council and the university provides financial and logistic support by means of hiring expert choreographers, musicians, other experts in various forms of arts for training and mentoring.

VRUND: CHARUSAT also celebrates The Garba Eve- Vrund, every year. It is a celebration of one of the most anticipated festivals of Gujarat - Navratri. Students and staff of CHARUSAT celebrate the event as a fusion of happiness, tradition, colour, devotion and respect for culture. Every year about 4000 students and 500 staff members participate in Garba and Raas at Central Lawn of CHARUSAT Campus. Prizes and

awards were given for best performance and best dressing khelaiya.

Few achievements of CHARUSAT students and alumni during the past 5 years are:

1. Ms Kanchi Acharya, received Second prize in Bharatnatyam and first Prize in 63rd All India Drama & Dance Competition
2. Akshay Patel, achieved 1st Position in Mono – Acting in the 20th Biennial Conference
3. Sahil Jackson, felicitated in the National Cadet Corps Youth Exchange Programme, Russia
4. Ravi Gill, and Hiral Gajera participated in the National Republic Day parade 2018 and Hiral Gajera also participated as a member of the Gujarat Culture Team
5. CHARUSAT students' sports and cultural teams secured top positions in several state and national level team games like cricket, kabaddi, volleyball and tug of war

The university actively encourages and provides facilities to practice Yoga and meditation among students and staff. University has in-house experts trained in Yoga who lead university yoga sessions and offer their services to neighbourhood communities and schools. Thus, the university has adequate facilities for:

1. Development of mind-cultural fests/Tech-fests/Liberal Arts workshops/Classical music events.
2. Development of Body – Sports grounds, gymnasia, walking tracks.
3. Spiritual Development – Auditoria for spiritual discourses, open lawns for Yoga and Meditation.

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

4.1.3 Availability of general campus facilities and overall ambience

Response:

General campus Facilities and its Utilization:

Office Rooms

There are separate Executive offices for University executives with interiors, furniture and fixtures. Each constituent institute has a fully furnished Principals' Office. Each department is provided with a separate fully furnished HOD room and Staff rooms. All offices and staff rooms are provided with separate restrooms. There is an allocation of budget for all office items.

Common Rooms and Rest Rooms

Common rooms, covering an area of about 400 sq. m are provided for boys' and Girls' with Bed, attached restrooms, lockers with other furniture. Restrooms for boys' and Girls' are provided at each floor of all the buildings. On the ground floor of every building, restrooms are available for physically challenged persons.

Ramp at the entrance of each Building is provided for physically challenged students.

Outdoor and Indoor sports facilities

2 Playgrounds having an area of 32,434 sq. m. are regularly used by Students and Staff for playing cricket, football, volleyball, Basketball, Handball etc. Another playground (10652 sq. m) is under planning. A separate room is available for indoor games where students and staff can play Table Tennis, Carom, and Chess.

Gymnasium

Gymnasium with Multi Gym facilities is available at campus for utilization by students and staff from 7:00 am to 7:00 pm. It has an area of about 275 sq. m. Another Fitness Centre is also in the physiotherapy institute building in the healthcare zone of the campus.

Auditoria

The University has constructed state-of-the-art auditoria with AC and ultra-modern audio-video support systems to assist in the organization of various events for the benefit of the students and teachers alike. There are nine auditoria with different seating capacity at CHARUSAT, namely, Shri Ambalal I. Patel Auditorium with 400 seats (CMPICA Building), CHARUSAT Auditorium 1 with 260 seats (PDPIAS building), CHARUSAT Auditorium 2 with 280 seats (RPCP building), CHARUSAT Auditorium 3 with 130 seats (DEPSTAR building), CHARUSAT Auditorium 4 with 130 seats (CSPIT building), CHARUSAT Auditorium 5 with 145 seats (MTIN building), CHARUSAT Auditorium 6 with 174 seats (DEPSTAR building), CHARUSAT Auditorium 7 with 251 seats (IIIM building) and CHARUSAT Auditorium 8 with 163 seats (CSPIT building). These auditoria are available to all the institutes on campus on the basis of prior intimation. Two open-air theatres are also available on the campus where events on a large scale like convocations and cultural events are held (2000- 3000 seating capacity).

Cultural events/activities

Facilities and training are provided to students for participation in invitational tournaments (including sports, cultural, co-curricular and extra-curricular events) and inter-university tournaments. Mentoring is provided by the faculty of the respective institute.

Celebrations of various days

Students are guided and encouraged to participate in and celebrate various events like Cultural Days, Traditional Days, Teacher's Day, Engineer's Day, Annual Day, Sports Day, Festival Celebration (Navratri, Dhuleti, kite-flying etc.), Republic Day, Independence Day, International Nurses Day, International Yoga Day, National Pharmacy Week and Students Tech-Fests. Institutes also facilitate arrangements for Fresher's and Farewell parties by the students.

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

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

Response: 20.77

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

2019-20	2018-19	2017-18	2016-17	2015-16
1358.85	925.46	1220.37	947.95	1030.85

File Description	Document
Upload audited utilization statements	[View Document](#)
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

Response:

CHARUSAT library was established in the year 2000 to facilitate learning, teaching, research, training, and consultancy activities. It is spread over 1000 sq. meters. Subsequently, Institute Level Libraries were developed from time to time as various Institutes were established. The library caters to the information needs of more than 8,000 users of various disciplines and also offering membership to alumni and corporate members. CHARUSAT has its own publishing house. CHARUSAT runs the 'CHARUSAT Rural Education Development Program' for educating children from rural places of nearby villages. Under this unique initiative, University provides library access to all the children who are taking benefit of the CREDP. CHARUSAT has Institutional Membership of DELNET, IIM-A, AMA, British Council Library, and AIMA. Students, Research Scholars and Staff members of the University can take benefit of these memberships to access all available resources.

Integrated Library Management System:

The library has more than 95000 books, Rare books 1412, e-journals 11000, 348 Periodicals - Journals and Magazines, more than 7000 CDs/DVDs/Floppies and 350+ Course Packs from IIM, 250+ Case studies from HBR, IIMs, etc., on various subjects, and more than 3400 Bound Periodicals, 3500+ Project Reports, 186+ Thesis.

Libraries use *Library Management Software (LMS)* for University Libraries. **SOUL** is an integrated library management software. It is based on the requirements of college and university libraries. SOUL 2.0 is compliant with international standards such as MARC 21 bibliographic format, Unicode based Universal Character Sets for multilingual bibliographic records. The soul software system consists of various modules - acquisition processes – Books and Periodicals, cataloguing for systematic retrieval of documents through OPAC, Web OPAC, etc. RFID and bar-coding system are in use to computerize the bibliographic details of the resources.

Library provides 'On Desktop Facility' to current students, research scholars, and faculty members. All registered library users have been provided with this facility for accessing digital resources from the comfort of their home. Librarians provide document delivery services digitally to selected students, research scholars and staff on request.

The library also provides facilities for differently-abled to access all the available library resources at ease through software like ABBY FineReader and NVDA, and E-Reader Instruments. The library further provides doorstep services to other differently-abled users by making resources available on the request.

Digitization Facility:

The University has D-Space (CHARUNIDHI) to build and update Institutional Repository. We have been archiving institutional knowledge outputs, like faculty research papers, theses, dissertations, which are archived on D-Space. It also holds the collection of University Quarterly Newsletter -CHARUSAT Comet, Journals published by University, Convocation Address of Chief Guest, and the Charotar Moti Sattavis Patidar Samaj in the form of Monthly Magazine, and a series of Sir Shanti Swaroop Bhatnagar Memorial Lectures.

The CHARUSAT provides Cloud-based digitized services. The libraries started digitizing Newspaper Clippings, Exam papers, Rare Books and Samaj Goshthi in 2009. These digitized resources were given access through the intranet. Any user who has credentials for the domain can access this database.

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

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[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: 114.35

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

2019-20	2018-19	2017-18	2016-17	2015-16
104.24	94.48	103.27	145.38	124.39

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

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

Response: 2.3

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

Response: 175

File Description	Document
Details of library usage by teachers and students (Library accession register, online accession details to be provided as supporting documents)	[View Document](#)
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Percentage of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities. (Data for the latest completed academic year)

Response: 100

4.3.1.1 **Number of classrooms and seminar halls with ICT facilities**

Response: 141

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

4.3.2 Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

Response:

CHARUSAT envisage providing its stakeholders the most advanced and innovative IT infrastructure. The primary responsibility of formulating and executing IT policy lies with Wireless information and networking cell (WINCELL). It is headed by IT-Advisor and has technical staff and IT experts as its members. WINCELL, formed in 2003, has established Cloud Ready Central Setup facilities and manages all central IT services like Internet, e-mail, e-governance and other departmental as well as institutional servers. A robust Fire-wall is commissioned to secure IT network in accordance with IT Policy. The salient features are mentioned below:

Networking Policy

- All Institutional Buildings and blocks are provided fibre, Ethernet and Wireless connectivity
- Two isolated Wired and Wireless networks are commissioned to facilitate all IT services to stakeholders within offices, classrooms, halls and in open areas (central squares and passages)
- All the buildings are connected with fibre cables in a ring topology strengthening network connectivity
- Most modern network technology and equipment are procured and utilized efficiently

Data Centre, Cloud Computing and Server Policy

- All IT services and portals are managed by a Central Data Centre with cloud ready infrastructure and redundant power supply having fibre optic connectivity
- The IT services are to be planned with High Availability (HA)
- Servers are deployed on Cloud Ready Cluster environment
- Central Storage Area Network (SAN) connected to Cloud infrastructure
- Incremental and full back up policy deployed for all the server database
- Daily and weekly backup for highly important servers
- One copy of off-site backup for vital database is scheduled at other institutional building

Cyber and Security Policy

- Gateway level firewall is implemented to protect WAN traffic
- Different internet usage procedures are designed for students, staff, HOD's, Principal and

Management

- Staff and students have their own login for internet access
- Internet bandwidth up-gradation every year
- Internet surfing reports monitored on regular basis
- Social media sites controlled as per the need
- Internet on Mobile and Tablets restriction to avoid student's internet surfing during classroom teaching
- Deployment of Antivirus solution to protect against computer viruses

Email Policy

- Two separate proprietary email domains for students and staff
- Controlled emailing powers considering Management people, Deans, Principals, and Heads for sending email to group
- A well-designed grouping for efficient email communication

Power/AC policy

- Entire Data Centre protected with Online UPS having at least 1 Hour battery backup
- DC Generator connectivity provided to datacentre UPS
- Required numbers of Air Conditioners installed to maintain Datacentre temperature

Expansion Plan of updating IT facilities

- From time to time, the management reviews the requirements of the Data centre considering any technological updates and will allocate the required budget for the same

Current expansion plan

The management has planned to facelift the current data centre with the inclusion of a smart rack replacing the current conventional racks at a budgetary cost of Rs. 65 lacs. Also, the new aesthetics are planned to give the data centre a professional look. This new commissioning will be having environmental friendly aspects in technology deployment and efficient power utilisation.

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

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

Response: 2:1

File Description	Document
Student – computer ratio	View Document

4.3.4 Available bandwidth of internet connection in the Institution   (Leased line)

Response: B. 500 MBPS - 1 GBPS

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

4.3.5 Institution has the following Facilities for e-content development

   1. **Media centre**
   2. **Audio visual centre**
   3. **Lecture Capturing System(LCS)**
   4. **Mixing equipments and softwares for editing**

Response: A. All of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Links of photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 78.47

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

2019-20	2018-19	2017-18	2016-17	2015-16
4830.46	4192.61	3991.53	3929.66	3704.78

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Audited statements of accounts	[View Document](#)

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

Response:

CHARUSAT has an Infrastructure Development and Maintenance Section (IDMS) office comprising technical and administrative staff for overseeing (1) New Development and (2) Maintenance of buildings, classrooms, laboratories and other Infrastructure facilities including emergency set-ups like sanitization tunnels as per the unlock guidelines during the pandemic.

Infrastructure Development and Maintenance Committees (IDMC) have been constituted in each department and the institute is responsible for the smooth execution of maintenance and similar activities in a coordinated manner between Departments and IDMS office.

Infrastructure Development

University has a policy for the creation and enhancement of infrastructure depending on the requirements of academics in a general change in the curriculum, introduction of new programmes and facilities to students and employees. Accordingly, all the constituent institutes of CHARUSAT are provided with all modern amenities like well-equipped laboratories with safety features, 24X7 Wi-Fi enabled campus with high bandwidth, ICT enabled classrooms / interactive theatres, auditoriums, seminar halls, computer centres etc.

Infrastructure Maintenance

Maintenance requests received by IDMS are executed as per defined standard operating procedures. Minor maintenance requests are immediately taken care of by IDMS. For maintenance requirements involving more expense finance committee approvals are taken before work execution. A workshop headed by Workshop Superintendent looks after maintenance and preventive maintenance work related to Carpentry, Fabrication etc.

Up to date records of Preventive maintenance, breakdown maintenance, and logbook of machines/equipment are maintained by the Institutes. Interdepartmental verification of stock is carried at the end of every year and the missing or damaged items are noted / written off. Sophisticated equipment is covered under an annual maintenance contract. Budgeted provision of 10-15% of Capital Related Expenditure is made each year for Maintenance expense.

A dedicated Wireless Information and Networking Cell (WINCell) has been created to look after the IT Services, maintenance and its Management. There is a central repository for software available on CHARUSAT Intranet. Upgradation of this licensed software is carried out periodically and new software

are purchased as and when required. CHARUSAT network is protected by enhanced security with the use of secure static IP and subnetting which isolates it from other outer and unsecured network threats. Enterprise-level antivirus is implemented for securing critical data.

Infrastructure Utilisation

Classrooms and Laboratories

Department / Institute prepare classrooms and laboratories time slots to ensure its effective utilisation. In all the institutes each classroom is ICT enabled having high-end multimedia projector. PowerPoint presentations by faculty as well as students are encouraged. Good Laboratory Practices are followed for well-equipped laboratories in each of the constituent institutes. Safety aspects of the students and teachers are considered and wherever necessary, additional facilities like ventilation and air conditioning, Aseptic area, Fire extinguisher and Incinerator for biological waste are provided and regularly maintained.

Library

The library system at CHARUSAT has two components, namely, Central Library and Institutional Libraries. The Central Library caters for the general and common needs of students and faculty; whereas the institutional libraries cater to the highly specialized needs.

The library includes a wide range of books, e-books and a variety of national and international journals accessible in online mode and print mode. The library has a clear and prominent display of floor plans, signboards and fire alarms. Library Automation in the form of SOUL software is used for Catalogue search and transactions.

The library committee is responsible for policy framing, implementation monitoring and developmental aspects of the library. The library policy encourages actual physical access to the collection.

The maintenance of the library is done through a yearly audit wherein the key vitals of the library such as the purchase of new books, Journals, their utilization, issue/return details of books and footfalls are audited.

Sports complex

The campus has 2 Playgrounds regularly used by Students and Staff for playing cricket, football, volley ball, Basketball, Handball etc. A separate room is available for indoor games where students and staff can play Table Tennis, Carom, and Chess.

The campus has 2 gymnasiums with Multi Gym facilities is available at campus for utilization by students and staff from 7:00 am to 7:00 pm.

Dedicated staff in the Sports and cultural section is allocated for regular upkeep of sports and gymnasium facilities.

Computers

CHARUSAT campus has more than 3300 desktops, laptops and tablets with adequate printers of various

types. Students are given individual email ID. For internet surfing they are given dedicated large bandwidth. Students can access all the academic information and unhealthy websites are blocked through firewall policy. Personal laptops and mobile devices of students are availing the 24X7 Wi-Fi facility on the campus.

All staff members at CHARUSAT are allotted individual email and internet access ID. Various email groups have also been created to easily convey necessary information across departments, institutes and the whole campus. There are four dedicated computer centres with an internet surfing facilities in addition to computer labs for student use.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

Response: 42.85

5.1.1.1 **Number of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) year wise during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).**

2019-20	2018-19	2017-18	2016-17	2015-16
2417	3110	3076	2942	2520

File Description	Document
Upload self attested letter with the list of students sanctioned scholarship	[View Document]
Upload any additional information	[View Document]
Institutional data in prescribed format	[View Document]
Link for additional information	[View Document]

5.1.2 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Response: 94.43

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

2019-20	2018-19	2017-18	2016-17	2015-16
7223	6778	6458	5582	5203

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

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

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

5.1.4 The institution adopts the following for 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	<u>View Document</u>
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View Document</u>
Details of student grievances including sexual harassment and ragging cases	<u>View Document</u>

5.2 Student Progression

5.2.1 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: 82.24

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

2019-20	2018-19	2017-18	2016-17	2015-16
452	332	229	188	175

01-11-2021 11:51:51

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

2019-20	2018-19	2017-18	2016-17	2015-16
531	415	255	245	220

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

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

Response: 61.21

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

2019-20	2018-19	2017-18	2016-17	2015-16
968	1177	1230	1233	1052

File Description	Document
Self attested list of students placed	[View Document](#)
Institutional data in prescribed format	[View Document](#)

5.2.3 Percentage of student progression to higher education (previous graduating batch).

Response: 30.43

5.2.3.1 **Number of outgoing student progressing to higher education.**

Response: 566

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

5.3 Student Participation and Activities

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

Response: 112

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

2019-20	2018-19	2017-18	2016-17	2015-16
29	26	22	16	19

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters and certificates	[View Document](#)

5.3.2 Presence of Student Council and its activities for institutional development and student welfare.

Response:

CHARUSAT constitutes Students Council every academic year, to actively engage students in the matter of academic, research and cultural. The Students Council is the representation of the Student Community in University affairs. The functions of the Students Council are to organize various curricular/co-curricular events and take initiatives for student development. It also gives suggestions to university authorities related to academic enrichment and other development initiatives. The Student Council continuously strives for student' needs to build a healthy academic environment in the University.

Objectives

1. To promote and propagate life values in students.
2. To develop leadership skills, organizational skills and collaborative skills among students.
3. To enhance interaction among students of different faculties as well as within their own faculty.
4. To organise all-rounded co-curricular and extracurricular activities at Intra University and Inter University levels.
5. To raise awareness and encourage involvement in co-curricular and extracurricular activities among students.
6. To organize a variety of activities for holistic personality development of students.
7. To explore and bring out students potential and talents to the fullest.

Composition of Student Council

Student Council is the body of students formed to fulfil objectives mentioned herein above. Students, who

have been selected on Students Council of the University, shall strive to realise the objectives of Student Council. They work with a sense of responsibility to ensure the welfare of everyone in the students' community.

Activities by Student Council

Events	Probable Time	
Organize Cultural & Sport Festival events in CHARUSAT	January	
Vrund (Navaratri Festival)	Day of Sarad Purima	
Amul Volcano,FPU Youth Festival,AIU Youth Festival.	As per Organizer	
Orientation Session for first year students	July–August	
Farewell Function	April	
Alumni Meet	July/January	
Annual Functions	End of Academic Year	
Foundation Day Cultural Activates	January 28	
CHARUSAT Physiotherapy conference-CHAPCON	December	
AVALANCHE (RPCP)	February	
Pharma Battle (RPCP)	February	
Science Manthan (PDPIAS)	January	
IGNITE(CMPICA)	January	
AGNITO(CMPICA)	February	
CONVEGNO (IIIM)	February	
COGNIZANCE(FTE)	September	
Teachers Day	September 5	
Engineers Day	September 15	
National Science Day	February 28	
Independence Day	August 15	
Republic Day	January 26	

Suggestions were received from the students and has implemented:

- Students' requested to have a common dance room with various resources like sound system and

full size mirror, the same request was accepted by the university and well-equipped dance room was established under sports and cultural section.

- Due to increase in student's strength and suggestions by the central council team, new open-air theatre is established.
- Few modifications have been made as per students request regarding distribution of mementos along with certificates, increase in the prize money of each events along with adding new events in sports and cultural every year.

Some academic proposals have been implemented, such as increasing the number of new practical's and laboratory hours and providing more soft skill programs according to the needs of students with the acquisition of new software and put more books on the library table.

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

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 60.6

5.3.3.1 **Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
63	63	65	60	52

File Description	Document
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

CHARUSAT Alumni Association (CAA) has been registered as a public trust at ANAND PRADESH, ANAND. Public Trust registration office as per year 1950 Mumbai Public Trust Act (year 1950 in Mumbai 29). Its registration number is "**F/1819/ANAND**" and was issued on **23rd January 2017**.

- A total of **11,162** alumni have been registered and connected on the CHARUSAT Alumni portal. (https://charusatalumni.org/)
- CHARUSAT Alumni are working worldwide and have performed remarkable achievements in their companies such that their work is recognized by giving awards to them, which build the university reputation worldwide.
- Alumni of CAHRUSAT perform at a senior post in many multinational companies and provide better opportunities to our existing students in training and job aspects.
- Our university pass outs are invited and delivered guest lectures and expert talks (more than 175) for UG and PG students. Moreover, they have participated as speakers and sponsored various technical and non-technical events (workshops and conferences) organized by our university. More than **500** alumni visited and interacted with the students and faculties of CHARUSAT and give their feedbacks for a better endeavour of CHARUSAT University.
- Alumni played a role as representatives of the company during recruitments and motivated the existing set of students' by having their seniors' presence in the company.
- They engaged with the institution in the capacity of Visiting Faculty members.
- Alumni also formed the active member for Area Advisory Board and contributed to reviewing and developing the curriculum and keeping CHARUSAT Teaching Methodologies Industry Oriented and up to date.
- They are regularly sharing Lateral job posting for fellow alumni on the Alumni platform.
- They exclusively engaged with existing students of CHARUSAT and its Alumni under the Mentor-Mentee Program.
- They have donated more than 730 technical and non-technical books in the CHARUSAT library to increase the existing students' resources. They also started to donate money under CAA, which will be utilized for training, arranging an expert talk, workshop, and many more for existing students.

There are regular engagements and interaction between alumni and CHARUSAT happens at the institutes (two meetings per year) and the university level (one meeting per year) under the various CAA-Chapters and the Annual General Meet (AGM) respectively. Moreover, CAA has successfully organized and managed alumni meet under the Geographic area wise chapter. During Alumni meet at the institute and university level, alumni have given better suggestions for improving existing facilities, alumni engagement, new initiatives to provide modern infrastructure, and many more.

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

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

Response: D. 5 Lakhs - 20 Lakhs

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.

Response:

CHARUSAT functions on four core values: honesty, integrity, transparency and social responsibility. They are deeply ingrained in the ideologies of the torchbearers while the stakeholders are sensitized about the same through induction/orientation programs, on-campus displays, website and featuring it in institutional documents. The Vision and Mission statements of CHARUSAT are as follows

Vision:

To become a dynamic global institution in a knowledge driven world through excellence in teaching, research and social contributions

Mission:

To serve society by striving to transform it through creation, augmentation, dissemination and perpetuation of knowledge

The well-documented vision plan delineates academic and research excellence, community development and financial self-sufficiency with an approach to groom leadership through providing functional autonomy at various levels.

Academic excellence is one of the key performance areas. CHARUSAT offers semester-based programs through Choice Based Credit System (CBCS). The curricula are at par with international standards in science and technology while adequately addressing the national needs. Continuous refinement in academic process is attained through feedback from students, peers and experts. The emphasis is on imparting outcome-based education through student-centric pedagogical innovations, regular upskilling of faculty and value additions like projects, internships, industrial visits, expert sessions and career development initiatives. The evaluation system includes institute-level continuous and University-level external components, with minimized human interventions. Multidimensional development of students is promoted through unique courses on Liberal Arts and Creativity, Problem solving & Innovations. Adherence to academic calendar and a robust mentor-mentee system ensures student-friendly learning environment and monitors students' holistic progress.

CHARUSAT promotes research-driven empowerment of academics and society. Well-structured policies and continuous endeavours from University Research Cell (URC) is reflected as successful implementation of over 80 funded research project worth ~INR 14 Crores; yielding >1000 publications in national and international journals as well as filing of 18 patents. Consultancy projects of commercial, technological/scientific, environmental and social relevance reflect an active industry-interface, managed through University Industry Interaction Cell (UIIC). Entrepreneurship Development and Incubation Cell (EDIC) mentors young minds to make successful entrepreneurs contributing to societal development. CHARUSAT Start-up and Innovation Centre has been institutionalized for effective facilitation of

innovative projects from students and faculty members and further strengthen the entrepreneurial ecosystem.

CHARUSAT pledges to serve the community in all its capacities. Through Charotar Rural Education Development Program (CREDP) and NSS initiatives, CHARUSAT has adopted **6** villages under Unnat Bharat Abhiyaan. Active initiatives are undertaken to uplift socio-economic quality of life in near vicinity through imparting free primary education, affordable healthcare services and upgrading the civic substructure. Infrastructural set-up, research and academic practices are also inclined towards environment preservation and sustainable development.

The Governing Body and Board of Management comprises of academicians, researchers and industrialists -all providing voluntary services and philanthropic donations. No capitation fees, no hidden costs to students, UGC pay scales, mechanisms of internal and external audits, preparation of audited financial statements always before 10th April are some of the aspects reflecting the core values imbibed in Governance.

Thus, CHARUSAT espouses, teaches and practices its mission and endeavours to follow its vision.

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

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

Response:

CHARUSAT has adopted the philosophy of inclusive growth by involving all the employees in decision making process like recruitment, finance and purchases, admissions, infrastructural development, budgeting, curricula development, transaction and assessment. Active consideration of the feedback from all the stakeholders is ensured to strengthen these dimensions

1. Functional autonomy at the level of curricula development, transaction and assessment

Teachers of each constituent institute have been given autonomy in matters of academic enrichment. Autonomy in curricula design, pedagogy, and continuous assessment. Faculty members are given complete autonomy to decide the components of continuous evaluation. Curriculum development and pedagogy are upgraded based on the comprehensive analysis of feedback from outside academia, students, alumni, parents, academic peers, in-house faculty members and industrial experts, while aligning it with the vision and mission of the university.

2. Empowerment of the employees.

Empowering the employees to gain individual-centric professional development is a prime practice followed. The faculty members have the autonomy to decide their respective key performance areas (KPA) within the given performance domain. Every employee decides his/her own key performance areas and

goals which are then appraised vis-à-vis self-appraisals. Faculty members also have an autonomy to define their research pursuits and chart out their research endeavors accordingly. The faculty members are encouraged to upgrade their knowledge in their chosen domain on a regular basis and are supported financially (Rs. 20,000/- per head/year within India, and 1,00,000/- per head/Five year outside of India) towards the same. Faculty are also empowered to enhance their skills through acquiring training in industries/industrial sectors of their choice. For pursuit of research and innovation in Teaching-Learning system, Faculty members are given autonomy to recommend procurement of equipment, software, books and other resources. Teachers are facilitated to pursue PhD. University offers scholarship of Rs. 20,000/- per year, continuation of salary and expenditure budget of Rs. 30,000/- per year to teachers pursuing PhD.

The interaction with the stakeholders is done through

1. Representation in various bodies: Stakeholders like employers, industry, Academia, Scientists etc. are representative members in bodies like BoS, Faculty Board, Academic Council, BoM, GB, etc.
2. Interaction: Stakeholders like Alumni, Parents, Academia, Students, industry are also interacted with during several events like parents meetings, Alumni meet, Student- counselling sessions, seminars, etc.

The University ensures that all positions in its various statutory bodies are filled. The University does promote culture of participative management. It is reflected as under:

No.	Processes/Bodies	Participation	
1	Governing Body	Provost(Vice Chancellor), Deans, Experts	
2	Board of Management	Provost, Deans, Principals, HoDs, Experts	
3	Academic Council	Provost, Deans, HoDs, Teachers from various faculties,	
4	Faculty Board	Deans, HoDs, Teachers across the faculty, Experts	
5	Board of Studies	HoDs, Teachers across the department, Experts	
6	Recruitment	Provost, Deans, Principal, HoDs, Teachers, Experts	
7	Purchases	Principal, HoDs, Teachers and Laboratory Technicians	
8	Seminars/Tech-fest., Extra & Co-Curricular activities	Principal, Teachers and Students	
9	Policy formulation	Teachers across the University and participants of proc to 8)	

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

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic plan is effectively deployed.

Response:

Charotar University of Science and Technology, CHARUSAT aspires to be a **World Class University (WCU)**. This aspiration can be realized after CHARUSAT appears in the **league of top 20 universities of the Nation**. Hence, based on the Vision and Mission of the University, CHARUSAT had developed and

effectively implemented its **Vision 2020 Plan** for the duration of 2015-20. Similarly, a corresponding Vision Plan has also been prepared for the next five years to realize its vision of being in the **league of top 20 universities of the Nation**.

The plan has been prepared based on a comprehensive SWOC analysis carried out by all the Institutes and Departments. Proper implementation mechanism and monitoring has also been developed for the University and also for all of its constituent Institutes, Departments and Centres.

The Strategic Plan of CHARUSAT is a plan elaborating strategic actions of University considering its own vision, its past accomplishments, its strengths and resources, and the challenges posed by the environment. The challenges identified by CHARUSAT are:

- Government Policies and (Lack of) Autonomy
- Competition and increasing the Brand Equity of CHARUSAT
- Resource Generation
- Reconciling Autonomy with Quality Enhancement
- Affordability of Higher Education to Common man/ people
- Digital initiatives and disruption due to ICT and other Technological changes
- Availability and retention of outstanding faculty

The strategic response to the challenges as well as achievement of CHARUSAT vision is planned through following dimensions, with institutional values of Honesty, Integrity and Transparency:

1. Enhancing and Broadening Teaching- Learning Process
2. Strengthening Research & Development
3. Student services and Enhancing Students' Life on the Campus
4. Strengthening Societal Interaction: Charotar, Industry and the Society at large
5. Augmenting Resource Generation
6. Faculty and Human Potential
7. Leadership, Governance & Planning

In this regard, several measures have been taken by the University to implement the strategic plan. Some of the major initiatives are:

1. National Level advertisement (minimum once a year) for faculty recruitment
2. Preference in appointment to Faculty with Ph. D Degree as a basic qualification and evident research output in the form of quality Research Publications
3. Students' feedback of the Faculty, Teaching – Learning including its monitoring at the Department, Institute Level and weightage in the annual performance appraisal
4. In house enhanced training efforts through **Human Resource Development Centre** in fostering attitude, enhancing knowledge and sharpening skills with its reflection in annual performance appraisals
5. Fostering research through various initiatives like: providing financial support to the teachers for participation / presentation at reputed National/ International events within the country as well as abroad; Post-Doctoral Fellowships; Seed money for research as well as financial assistance to conduct various events; Institutionalizing Research Paper Awards; Providing financial assistance to full-time Research Scholars and UG-PG Students for Research; and Publishing University Research Journal.

The plan is being achieved by focusing on *Research, Development and Innovation*; *Teaching, Learning and Assessment*; and *Extension and Community Service* as the **Core Performance Areas** through *Good Governance*, *Infrastructure*, *Faculty Competence* and *Student Talent* as **Core Capacity Dimensions**.

File Description	Document
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 and service rules, procedures, etc.

Response:

The University has well-linked organizational structure to facilitate participative decision making and execution.

For academic and research aspect, Board of Studies, Faculty Boards, Research Council and Academic Council are in place. For other aspects University Industry Interaction Cell (UIIC), CHARUSAT Rural Education Development Program (CREDP), Career Development and Placement Cell (CDPC) are in place. Advisory Boards, HR Committee and Finance Committee are also well functional. Decision of all these are discussed in Board of Management. The decisions of Board of Management are ultimately taken up in Governing Body. The approach is both ways: top-down and bottom up. This approach ensures fast, efficient and effective decision making.

File Description	Document
Any additional information	[View Document](#)
Link to Organogram of the University webpage	[View Document](#)

6.2.3 Institution Implements e-governance covering following areas of operation

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP (Enterprise Resource Planning) Document	[View Document](#)
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	[View Document](#)

6.3 Faculty Empowerment Strategies

6.3.1 The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff .

Response:

Performance Appraisal System, Promotional avenues:

Performance appraisal system and promotional avenues are designed to bring out excellence of teachers. It is mainly based on self-appraisals vis-à-vis annual goals set by the Teachers themselves. The annual performance of teachers is done through Performance Based Appraisal System (PBAS) designed in consonance with UGC. Also, Students Feedback System is in place which forms part of faculty performance appraisal undertaken annually. Each teacher is given opportunity to interact with the University committee.

The Assessment of the performance of teachers is based on the following criteria:

1. Teaching-Learning and Evaluation related activity
2. Professional Development, Co-Curricular and Extension Activities
3. Research and Academic contributions

Feedback of performance is given to teachers through formal communication in the form of appraisal letter or areas in which teachers have to emphasis to improve/enhance his/her performance. The efforts and contribution of the faculty members in the area of research and innovations are acknowledged through various means like felicitation during annual day celebration with certificates, appreciation letters and mementos and cash prize.

Career Advancement/Promotion scheme:

The career advancement scheme (CAS) is in consonance with UGC.

The following step is adopted for carrying out assessment for promotion under the CAS:

1. After completion of the required years of experience, desired qualifications for promotion under CAS and required Academic Performance Indicator (API) teachers submit their application.
2. A CAS promotion is granted on recommendation of the Screening cum Evaluation Committee.

CHARUSAT practices and follows the performance appraisal of non-teaching staff (Administrative Staff,

Laboratory Staff and supporting staff). They are also given opportunity for promotion based on the decided structure if he/she meets the performance expectations.

Effective welfare measures for teaching and non-teaching employees of Charusat.

CHARUSAT believes that the well-being of employees is important for growth and development. Many welfare measures have been implemented:

1. Allowances and Benefits as per Government Norms:

- Dearness Allowances, Travelling Allowances, Medical Allowances
- Gratuity
- Employee Provident Fund (EPF)
- Leave Encashment
- Maternity & Paternity Leave
- Sabbatical Leave

1. Initiatives for Self-Development:

- Permission for Higher study (Including Foreign Tour)
- Financial Assistance for participation in National/ International/Conference/

Seminar/Workshop/Symposium/STTP/FDP/Industrial Training etc.

- IELTS /APTIS Coaching
- Training & Development (In campus and outside campus)
- Research Project Assistantance
- Best Research Paper Awards
- Access to Sports facility and gymnasium in the campus

1. Welfare Activities

- Medical Insurance
- Group Personal Accident Insurance
- Medical facility of CHARUSAT Hospital like OPD and Yearly health check-up etc.
- Emergency Medical Service for Employees of Charusat up to Rs.25000/-
- Charusat Employees Consumer Co-operative Society Ltd.
- Women friendly campus
- Scheme of Fees Waiver for Children/Spouse of CHARUSAT Employees
- Scheme of Financial Aid for Children of Attendants for School Education.
- The Kaira District Central Cooperative Bank Limited (KDCC) branch in campus for banking needs of the staff and students.

File Description	Document
Any additional information	

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: 23.53

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

2019-20	2018-19	2017-18	2016-17	2015-16
88	72	79	90	98

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years (Data Template)	
Link for Additional Information	

Other Upload Files	
1	

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

Response: 69.6

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

2019-20	2018-19	2017-18	2016-17	2015-16
104	76	66	59	43

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	<u>View Document</u>
Reports of Academic Staff College or similar centers	<u>View Document</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for Additional Information	<u>View Document</u>

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

Response: 62.27

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

2019-20	2018-19	2017-18	2016-17	2015-16
297	208	225	216	185

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

6.4 Financial Management and Resource Mobilization

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

Response:

Being an unaided institution, fund mobilization and its optimum utilization becomes a crucial aspect of resource management. The capital and current expenditure is borne through philanthropic donations, project funding, allocation from fees income, consultancy and internal resources. Fees for majority of the programs offered by the university are regulated through Fee Regulatory Committee. Fees are aligned with the resource intensiveness of the programs and affordability to students.

Although the university allocates dedicated fund to support the research initialization, emphasis is also on encouraging faculty members to seek financial support from Government funding agencies like DST-SERB, DBT, GUJCOST, DAE, GSBTM, AICTE etc. Attempts are also made to seek funds from funding agencies to support research-oriented initiatives like organization of workshops/conferences/seminars/symposia/STTPs. University also receives endowment funds for offering specialized course like 'Creativity, Problem Solving and Innovation', courses on Foundation of Basic Sciences or for hosting chair professors to intensify on-campus research. Partial financial support for organizing curricular and extra-curricular activities is also obtained from stakeholders and associates.

For academic enhancement and dissemination, several resources have been received in kind. These include over 5000 books for library, graphic cards and device through NVidea GPU grants; robotic equipment through E-yantra platform of IIT, Mumbai; Eye Tracker donated by Maastricht University, Netherland, BMW's proprietary engines donated by BMW group India and Renault petrol car engine donated by Technocraft Engineering, Vadodara; Skill development workshop sponsored by Alembic Pharma, Vadodara and so on. GUJCOST has supported installation of a Supercomputer facility.

The university ensures efficient use of financial resources through well-structured regulations and transparent practices. CHARUSAT has adopted a system to draw a yearly financial budget. Every quarter the budget is reviewed with actuals in the Financial Committee's meeting. Variances are drawn and actions are taken to minimize the negative variance. Records are maintained as soft and hard copies. Internal as well as external audits are conducted by professionals (CAs). Financial transactions are based on the Makers-checkers' concept. Final accounts are prepared by following standard accounting principles.

Effective systems are set for executing the budget. The procurement of equipment and supporting infrastructure, is routed through institute-level and university-level purchase committees and finance committees, after due review of the proposals. Post-purchase installations of the equipment are aligned with training sessions for the users to ensure optimal utilization of the facility. Dedicated training sessions are also conducted for upskilling the end-users. Sophisticated instruments and software are made accessible for users from across the campus and near vicinity, through a standard mechanism involving nominal charges. The revenue generated is utilized for the maintenance of the machinery. Routine maintenance and functioning of the instruments are ensured and audited through faculty in-charges and university-level committees. Purchase of chemicals and consumables is managed through e-governance via annual rate contracts while their judicious consumption is encouraged through sharing-based bulk purchases and prior planning.

Overall, the strategic goal is to build consistent and adequate corpus of resources, monitor their optimal utilization and ensure maximum output while benefiting its stakeholders.

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

6.4.2 Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response: 47.55

6.4.2.1 *Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).*

2019-20	2018-19	2017-18	2016-17	2015-16
29.89	7.08	10.58	0	0

File Description	Document
Details of Funds / Grants received from government bodies during the last five years (Data Template)	[View Document]
Any additional information	[View Document]
Annual statements of accounts	[View Document]
Link for Additional Information	[View Document]

6.4.3 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Response: 1541.42

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

2019-20	2018-19	2017-18	2016-17	2015-16
31	109.99	342.80	157.48	900.15

File Description	Document
Institutional data in prescribed format	[View Document]
Any additional information	[View Document]
Annual statements of accounts	[View Document]
Link for Additional Information	[View Document]

6.4.4 Institution conducts internal and external financial audits regularly

Response:

CHARUSAT has the mechanism of Internal and External Audit. Internal Audit is performed by the Internal Auditor for all the transactions of the University. The External Audit is undertaken quarterly by the Statutory Auditor. Both the auditors are qualified chartered accountants.

The audited Accounts of the University are prepared within 10 days after 31st March of each Financial Year. As a result of Accurate and Precise Accounting, there have been no major audit objections.

The finance committee appropriately considers audit remarks if any. The internal audit remarks are immediately addressed and the external auditors audit report is considered at the end of financial year.

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

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

Response:

IQAC-CHARUSAT operates through a hierarchy involving a university-level core team and representatives from each of its component institutes. IQAC plays an instrumental role in planning, monitoring, reviewing, refining and reforming the academic, research and administrative functionalities of the university through

- Academic planning and monitoring
- Implementation of Outcome Based Education (OBE)
- Endorsing research-driven academics through inclusion of quality academic practices like in-house research projects, interdisciplinary learning and other value-added learning modules to augment the intellectual capacity and employability of students.
- Benchmarking quality practices teaching-learning process, research and university operations. This includes ensuring timely completion of various academic activities, coordinating regular meetings of various functional committees, improvising various policies, mapping of the annual goal statements for faculty members, propelling research activities and its outputs etc.
- Charting the University Vision Plan and its monitoring
- Guiding peer organizations over conceptualization and implementation of quality practices.

The two practices that have been successfully institutionalized as a result of IQAC initiatives are as follows:

1. Academic and Administrative Audits (AAA) of its constituent institutes

Conducting annual AAA is rigorous initiative propelled by IQAC. The practice involves orientation to the activity by an internal committee at the end of the odd semester and inviting annual plans from all the 9 constituent institutes and 17 allied departments. Subsequently a team constituted by the Provost including external experts, conducts the audit at the end of the academic year. Feedback of institutional performance from this audit is communicated to respective institutional heads for self-assessment and future plan of action. A similar audit process has also been developed to review the policies and practices of different cells & centres on-campus.

Through these audits IQAC fosters need-based reformations in curricula, course transaction, examination, research initiatives and other practices. It facilitates faculty members to participate in programs focusing on quality enhancement and sustenance in higher education system.

Eventually, IQAC prepares, grooms, guides and facilitates participation of university and its institutions in state and national level ranking and accreditation frameworks like NAAC, NIRF, GSIRF, NBA, NABL etc

2. Implementation and strengthening of e-governance for streamlining of university operations

Since its inception, CHARUSAT utilizes an in-house 'e-Governance' system as an integrated solution for complete digitalization of CHARUSAT Campus. The e-Governance system is deployed largely on CHARUSAT intranet (private) network and access is provided to management, all the teaching & administrative staff, and students, to coherently manage them in a time-effective manner.

Updating the features is a continuous process. The goal is to develop a single-point data capturing system while initiating, executing and managing maximum possible operations. IQAC plays the crucial role here by identifying the gap areas needing streamlining, guiding, developing and implementing various functional modules. Through consistent efforts of IQAC, different functionalities like organizational set-up & security, HR, finance, academics and timetable, examination, purchase & inventory, feedback, as well as research activities like publications, project outputs participation at various academic/research events are successfully implemented through e-Governance. Constant efforts are made to sensitize the employees and students to regularly update the portal.

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

6.5.2 Institution has adopted the following for Quality assurance 1. Academic Administrative Audit (AAA) and follow up action taken 2.Confernces, Seminars, Workshops on quality conducted 3. Collaborative quality initiatives with other institution(s) 4.Orientation programme on quality issues for teachers and students 5. Participation in NIRF 6.Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

Response: A. Any 5 or more 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 (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Paste web link of Annual reports of University	[View Document](#)

6.5.3 Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

Response:

Multidimensional initiatives have been taken to ensure continuous quality improvement across various sections of academics, research and administration. Some of the major post-accreditation initiatives are as follows:

Quality Benchmarking

- CHARUSAT is rated in the band of Top 101-150 Universities in NIRF-2020. PDPIAS consistently ranked in top 50 colleges at NIRF while securing 24th rank in the year 2020. CHARUSAT and its four constituents viz CSPIT, MTIN, RPCP and CMPICA have secured top ranks in GSIRF rankings during 2020
- NABL accreditation of Environmental Engineering and Analube Labs
- Academic & Administrative Audits through committee including internal and external members
- Recognition as Scientific and Industrial Research Organization (SIRO) by DST
- In principle approval as Centre of Excellence by Government of Gujarat

Specific Post-accreditation initiatives as recommended by NAAC in first cycle

- Consolidating the implementation of Outcome-Based Education (OBE)
- Full implementation of CBCS across around 61 academic programs comprising of more than 1700 courses.
- Over 90 % of courses are oriented towards professional development and employability. More than 50 value added courses have been introduced in last five years for upskilling the students.
- Executive Programme on Clinical Hypnosis has been introduced to enable financial resource mobilization. Several resources received in kind and intellectual resources from various associations are also explored to impart add-on developmental experience to students through skill development-oriented workshops, trainings and internships.
- Entrepreneurship Development and Incubation Cell (EDIC) and CHARUSAT Start-up and Innovation Centre has been institutionalized to strengthen the entrepreneurial ecosystem. Entrepreneurship development programs worth ~30.5 lacs have benefitted 1780+ while over 90 start-up projects have been supported.

- CHARUSAT Alumni Association, registered as a trust, it explores the intellectual, financial and in-kind contributions of alumni capacities for organizing placement-related activities, industrial trainings and summer internships for UG and PG students. Effective alumni management through procurement of 'Almashines' has led to increase in alumni base over 3 folds (7986 members) in October 2018, with 10473 alumni registered currently.
- Corporate potential is tapped through implementation of collaborative research projects, industry-designed projects for students, consultancies, infrastructural augmentation and their inclusion in decision making through membership of corporate personnel in regulatory bodies.
- Implementation of 'Paperless Examination' and 'Exam from Home' using customized software and strengthening e-Governance as major examination reforms. This led to drastic reduction in human interference as well as paper consumption.
- Streamlining PhD Programme through revised University Research Policy, recognizing 178 qualified faculty members as eligible supervisors, timely monitoring of research progression by internal and external experts from nationally reputed institutes like IITs, IISc, IISERs etc. and ensure quality assessment of research outputs
- Upgrading ICT on campus through 101 WiFi access points, 1050 Mbps bandwidth, 3500+ computer installations and 21 virtual computing platforms. CHARUSAT is awarded with "Best ICT initiative in Education Sector" by GESIA. Paradigm shift to online teaching-learning has been propelled though extensive use of LMS and development of in-house MOOCs -*Charuvidya*
- Relative proportion of women employees is ~30 %

Functionalization of residential quarters for employees; approval of the location and plan for construction of on-campus boys' hostel

File Description	Document
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:

Gender equality is one of the university's top priorities and complies with the highest ethical standards in all its planning. All individuals, regardless of gender, caste, language, religion or other status, are given equal rights, resources, opportunities and protections. University's unique work culture, healthy traditions, and ideology have led to upto 50 % of density of university-wide women employees and female students. Charotar University of Science and Technology has following cells, which deal with gender issues and women empowerment.

1. Women's Development Cell (WDC)
2. Equal Opportunity Cell (EOC)
3. Grievance Redressal Cell (GRC)
4. Cell for the Prevention of Sexual Harassment (CPSH)
5. Anti-Ragging Committee (ARC)

Activities

a) Awareness and Sensitization Programmes

Gender equity programmes are created by proactive committee members in the form of poster creating contests, quizzes, expert talks, seminars, workshops, essay writing and poetry writing competitions. Legal education, legal redressal, conflict resolution, and gender sensitization are directed to female students and employees.

b) Special Support on Campus

On the campus of Charotar University of Science and Technology, residential quarters are available for both teaching and non-teaching personnel. A total of 20 dwelling units with a capacity of 80 people are available. Women personnel are given the greatest priority in current facilities. Aside from that, there are also day care services on campus. The university offers specialized transportation. The university provides special transportation for female workers who work long hours. Girl students from the college of medical sciences are provided with University transportation for posting and training in surrounding hospital centres and communities. In terms of female accommodations, the university accommodates 1100 girls students in the campus. The hostel has both AC and non-AC rooms. Personal space is essential, particularly for young adult females Girls common rooms are available and sanitary vending machines are available in every institutes. CHARUSAT has started a day care center for children (3 months to 3 years) of working women. It is a facility, which enables parents to leave their children while they are at work and where children are provided stimulating environment for their holistic development.

c) Outreach Programs for Women and Children

On International Women's Day and Women's Education Day, different camps and awareness activities are held to raise awareness among females in society. The promotion of "Menstrual Health and Hygiene," as well as the assessment of knowledge, attitude, and practice about menstruation, and the distribution of sanitary pads to girls and women in neighbouring communities. All newspapers waste generated from various institutes are used for making Paper Pens. Paper pens is one of the unique initiative of CHARUSAT in collaboration with Centre for Environment Education, Ahmedabad which is a Center of excellence of GoI. Charotar healthcare and research foundation launched **Vatsala Matrusambhal** program for the benefits of pregnant females of Charotar region for providing Pregnant ladies' health check-up, physiotherapy and dental screening was done. Breastfeeding and ergonomic advice, Pelvic floor, back and abdominal exercise were taught to the antenatal and postnatal female individually.

File Description	Document
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](#)
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 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:

Charotar University of Science & Technology, Changa has full-fledged in-house facilities for the management of Solid Waste and Liquid Waste (Sewage) generated in the campus premises. The University manages other types of wastes such as Biomedical Wastes, E-Wastes, Hazardous Wastes, etc. through the Gujarat Pollution Control Board authorized waste management agencies. The detailed description of the different types of waste management is as follows:

1. Solid Waste Management

The Solid Waste generated from the various department and institutes of CHARUSAT mainly consist of Papers, Packaging (Plastic) material, cardboards and waste food in a small quantity. The other major source of the solid waste is garden waste such as dried leaves and green cuttings.

CHARUSAT has developed a practice of segregating waste at its generation and has provided the two bin system (i.e. Dry Waste and Wet Waste) in all buildings. The waste dry waste is then taken to the Incinerator for burning under controlled conditions. Thus the dry waste is managed by controlled burning. The Wet waste along with Garden waste is put in the open pits to get naturally composted in the due course of time. This is then used at manure for gardens.

2. Liquid Waste Management

CHARUSAT has installed a 100 KLD capacity Integrated Wetland System for the treatment of Sewage. The quality of treated effluent is well within stipulated limits by pollution control board. There are total 34 Soak Pits/ Septic Tanks installed underground for the final disposal and management of sewage generated from the respective buildings.

3. Biomedical Waste Management

The Biomedical waste generated is segregated in various categories and the sent to M/s Samvedana BMW Incinerator (Unit-II), Tarapur (GPCB authorized **Common Bio-Medical Waste Treatment Facility (CBMWTF)**) for further management.

4. E-waste Management

The e-waste from campus is supplied to the authorized agency dealing with the recycling of the e-waste for further management.

5. Waste Recycling System

Reduction and reuse of resources is a unique tradition of CHARUSAT. Paper being a major waste material, emphasis is given to recycling it. All newspapers waste generated from various institutes are used for making Paper Pens. Paper pens is one of the unique initiatives of CHARUSAT in collaboration with the Center for Environment Education, Ahmedabad which is a centre of excellence of GoI. All papers generated through project submissions are reused for another side. To reduce the usage of Paper, CHARUSAT has adopted an E-governance system, which obviates the need of paper. CHARUSAT is the first university in Gujarat to have adopted paperless exams since 2019. Answer sheets, being generated before that, were given to authorized agencies to be sent to paper mills for recycling.

6. Hazardous Chemicals and Radioactive Waste Management

The hazardous chemicals and radioactive waste generated from various constituent laboratories is sent for safe management to the GPCB authorized Transfer, Storage and Disposal Facility (TSDF) at Nandesari Environment Control Ltd. (NECL).

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

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

7.1.5 Green campus initiatives include:

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

Response: Any 4 or All of the above

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

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

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
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. **Disabled-friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
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:

CHARUSAT makes efforts in providing an inclusive environment to students irrespective of their identity or learning preferences feel supported intellectually as well as academically. CHARUSAT ensures the intermingling of the students of various backgrounds starting from the very first year of their graduation program by celebrating their commencement. Here, the students are familiarized with university, institute, faculties, various cells and centres prevailing in the campus, the facilities that are available to them etc. Special sessions are arranged for senior interactions and ice cracking games that again help them to familiarise with the new people and new place. University offers elective courses on Liberal Arts on painting, photography, designing, dance, dramatics to the entrants of all undergraduate programs irrespective of their specialization. The university also arranges welcome parties for the entrants and farewell parties for the graduating students within the campus.

University has a very effective Mentor-mentee system. All the entering students are allotted a faculty counsellor who guide the students time to time for academic as well as non-academic development. The university celebrates regional and religious festivals at the campus to help in the holistic development of the personality of the students.

Spoural, a sports and cultural event of university is held every year and students take part in this annual cultural week. Around 30 On-stage and off-stage cultural events and 15 sports are organized and students participate in them zealously. University also organizes Vrund- a festival of our very own state Gujarat-NAVRATRI. Other activities like Sadbhavana Divas celebration, students perform street-plays on cultural, regional and social issues to spread awareness about love, brotherhood and oneness. All these activities are performed within campus or in the villages, adopted by university under Unnat Bharat Abhiyaan. Other cultural programs have also been organized at the university to spread the awareness about the cultural, regional and societal diversities including- Live Drama and Vocal Folk Singing Performance under 150 Years of Mahatma in collaboration with Vishwagram, Basna; live performance of Kavita Dwivedi- a well-known Odissi dancer from Orissa; a Cultural-Musical-Instrumental and Singing Program "Udat Abeel Gulal" by Pandit Shri Snehal Muzoomdar and many more. At the university, International mother language day is also been celebrated where in various competitions related to mother language, book exhibitions, movie screening etc. were arranged.

EOC, WDC, NSS unit, Grievance Redressal Cell and Students' Central Council are mainly involved in organizing all sorts of co-curricular as well as extracurricular activities with-in and out-side the campus. Apart from these activities, study tours are also arranged by the university to various regional and national places of importance that exposes them to the diverse environments. University students voluntarily conduct classes and developmental activities for rural children at the university campus after college hours. University has also conducted career guidance seminar, education awareness programs and education upliftment programs in nearby schools. NSS students have also initiated activities for welfare of animal bio-diversities at the campus like rescue of ill or injured animals or birds, preparing water containers for birds in summer etc.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	[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:

CHARUSAT has been conceived by Shri Charotar Moti Sattavis Patidar Kelavani Mandal - a not for profit premier education trust of India having a social lineage of more than a century. The Iron Man of India, Shree Sardar Vallabhbhai Patel believed, "Education without character is futile". CHARUSAT proudly follows this spirit. The university follows High Moral Values like **Honesty, Integrity, Transparency, Fairness, Equity, and Accountability**.

Through active efforts, CHARUSAT makes its family members (staff and students) aware of their role in the **development of the society** and the people there of. To inculcate the societal responsibilities in the students, the university has included a course of Values & Ethics in the curriculum. The course helps them to understand the basic concept and meaning of values and ethics, their elements and principles and the global issues pertaining to professional, organizational and social ethics.

To sensitize the students and staff members for the constitutional duties of **following ideals of freedom struggle** and let them recall the sacrifices of our freedom fighters, CHARUSAT organizes and participates in various activities. On the birth anniversary of Shri Sardar Vallabhbhai Patel, to inculcate the values of unity and Integrity, CHARUSAT organizes Run for Unity every year. Every year, university celebrates Independents Day and Republic Day with patriotism and enthusiasm, where students and teachers organize cultural programmes and performances. To commemorate and remember of the struggle done by activists' people to have a separate state of Gujarat, University celebrates Gujarat Foundation Day on 1st May. The university also celebrates various regional and religious festivals at the campus and encourage to **preserve the composite culture** of India.

Around 15 youth parliaments were organized on and off campus to make students aware about election processes, democratic formats and local and national politics. Students discuss various societal and national issues and suggest the solutions as well.

To spread the **spirit of common brotherhood** and to **protect integrity and unity of our country**, CHARUSAT always encourage its family members to initiate the charity for needy people. CHARUSAT has a concept of wall of kindness in the practice where usable items like warm cloths, blankets, utensils and books and stationary materials are donated anonymously. Every year, handsome amount of money is collected and donated by CHARUSAT members to the National Association for the Blind, Gujarat. Students and staff members also visits old age homes and orphanages for spreading smile and happiness amongst the less privileged people.

To **develop the scientific temper** in the students, the university regularly arranges the international, national or state level technical events where in students get the opportunities to learn new developments in the world.

To make our students self-sufficient and self-reliant, university encourages conduction of all such activities through Students' Central Council where-in, student members manage various avenues ranging from time, finance and human resource management.

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: B. 3 of the above

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

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

Response:

National and international commemorative days celebrations are an important element of Charotar University of Science and Technology (CHARUSAT) for students and teachers imbibe and strengthen the cultural values od unity in Diversity, Patrotism, Gender Equility and more.

CHARUSAT celebrates the international womens' day every year to bring awareness about women development on and. off the campus by conducting special talks from women excellence, essay writing,

poem recitation, slogan framing and panel discussion and by organizing women health through screening camps. On the occasion of Women's Education Day, the university provides education to girls from nearby communities and CHARUSAT Hospital conducts free medical health check ups camps.

The commemoration of World Environment Day, World Water Day, World Oceans Day, and International Day for the Preservation of the Ozone Layer allows everyone to recognise their responsibility to protect the environment. The tree planting camps, street rallies, street plays online awareness presentations, and a quiz are held for everyone on campus.

Independence Day, Republic Day, Constitution Day, National Unity Day, Voters Day, National Science Day, National Service Scheme Day, National French Day, and National Education Day are celebrated to build a sense of nationalism and patriotism among the students and teachers. The NSS unit encourages students from neighbouring schools to participate celebration of these events.

Few National days are also celebrated in memory of our freedom fighters and heros, such as the birth anniversary of Sardar Vallabhbhai Patel as National Unity Day, Swami Vivekanandss as National Youth Day, Dr. Sarvapalli Radhakrishnan commemorated as Teachers' Day by organizing lecture series and motivational movie shows.

One of the most effective weapons in the fight against raging health problems is the strength of human connection. That is why health awareness months, weeks, and days are so crucial: they bring people together to raise awareness and show support for a common cause. CHARUSAT organizes global public health days as World Osteoporosis Day, World Organ Donation Day, International Day of Yoga, World Pharmacist's Day, World Sight Day, World Spine day, World Osteoporosis Day, Anaesthesia Technician Day, National Nutritional week celebration, World Mental Health Day, World Physiotherapy Day celebration, World Heart Day, International Radiology Day, Blind Flag Day and World Cancer Day.

CHARUSAT has adopted six villages under the Unnat Bharat Abhiyan programme. Through activities like Swachh Bharat Mission, Girl Child Education, Community Sensitization Programs, and Maternal and Child Health Program, National Service Scheme (NSS) section of CHARUSAT undertakes a variety of tasks to support, raise awareness, and assist the general people.

Every year 28th January is celebrated as foundation day of CHARUSAT. On this day faculty members are awarded with research paper award for their contribution in research. Annual Days are organized every year to honor top rankers in different faculties. Students securing top ranks, right from first year to last year, are felicitated at these events. Also students are felicitated for their achievement in sports, cultureal activities and other co-curricular activities. Charusat Allumn Association celebrates Annual General Meeting(AGM) that gives the supportive alumni network.

File Description	Document
Geotagged photographs of some of the events	[View Document](#)
Annual report of the celebrations and commemorative events for the last five years	[View Document](#)

7.2 Best Practices

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

Response:

Best Practice 1:

1. Title of the Practice:

Initiatives towards environmental consciousness and sustainability at CHARUSAT

2. Objectives of the Practice:

- Creating awareness and familiarizing the youth about the environmental issues of the locality through unique learning experience and skill development
- Develop as a model organization involved in executing best practices towards environmental consciousness and sustainability through research-driven approach.

3.The Context:

CHARUSAT is motivated to design and explore the intersections of environment and learning, by supporting development of interventions that advance the wellbeing of both students and the environment. The initiative is to involve faculty members and students with diverse expertise and skills from across different constituent institutes, who can contribute to develop unique knowhow about the environmental problems prevailing in the wider surroundings. Their collective efforts are in turn expected to provide innovative models of research, analysis and partnerships; robust enough to not only sustain at CHARUSAT campus but also to inspire similar efforts on other campuses in future and gradually influence the lives of the social community.

4. The Practice:

A) Campus Initiatives:

- *Green Campus and Natural Environment:* Conscious efforts to develop and maintain lush green campus through exclusive gardening contracts and regular tree plantation drives
- *Biodiversity Management:* Biodiversity assessments of campus to improve the quality of campus environment and to enable students to understand environmental issues in a practical way. 'Silence zones' identified to ensure noise-free environment.
- *Clean Campus:* Wide-spread installations of wastebins; regular restoration of natural water reservoir; exclusive house-keeping contracts for routine cleanliness on campus area
- *Solid Waste Management:* Segregation of Dry and Wet Waste, Incineration of Paper and Organic Waste, Composting, standard disposal mechanisms for e-waste and biomedical waste
- *Water Management:* Rainwater harvesting through surface water detention and ground water recharge; regular drinking water quality assessment
- *Wastewater Management:* Part of campus sewage/ wastewater is treated using constructed wetland system and canna plantation. The sewage pond is managed by installing Sprinklers for DO regeneration and enhance natural purification.

- *Green Initiatives:* Use of solar power; digital paperless examination, Energy-efficient fittings -sensor-based lights, switching to LED lights; Energy and Green Audits of the campus
- MoU with Centre of Environmental Education to enable technology and knowledge sharing
- Restricted use of fuel-driven vehicles on-campus, provision of bicycles for routine transit, construction of walkways, no-honking and no-smoking policies, discouraging use of plastic

B) Institutional Initiatives

Curriculum/ Learning: The M. S. Patel Department of Civil Engineering of CSPIT offers different courses in the field of Environment such as:

- Environmental Sciences (All Programs University-wide 1st/2nd /3rd Semester)
- Environmental Sustainably & Climate Change (All Program 3rd Semester)
- Basics of Environmental Impact Assessment (All Program 4th Semester)
- Air Pollution and Control (Civil-5th Semester)
- Environmental Engineering-I (Water Supply Engineering, Civil 6th Semester)
- Environmental Engineering-II (Wastewater Engineering, Civil 7th Semester)
- Environmental Pollution & Control (Focusing on Industrial Pollution Civil -7th Semester)

C) Establishment of SDG Handprint Lab: Unique SDG Handprint Lab designed for Higher Education Institutions is an initiative to familiarize students about 17 SDGs, their targets and the 2030 Agenda for Sustainable Development and getting them to act at the local level.

The overall approach and strategy of the lab is based on the goals, targets and indicators of the SDGs; which involves seven steps.

- Orientation to SDGs, Handprint and the Programme
- Selection of SDG Targets
- Investigation (Baseline study)
- Developing Project Strategy and Plan of Action
- Handprint Action in the community
- Impact Evaluation & Project Report
- Evaluation, Certification and Exhibition

D) Community Initiatives:

- Encouraging students to work with local communities of the CREDP, CHARUSAT-adopted villages in areas like solid waste management, reduced plastics use, and conversion of plastic waste as well as paper waste to more valuable products
- "Environmental Service-Learning" facilitating studies regarding environmental health problems in the local communities and steps needed to mitigate them.

E) Other Initiatives

- Solar power panels have been installed on terraces of selected building so as to meet partial energy demands of the campus through renewable energy sources.
- Calculation of greenhouse gas emissions and carbon footprint of the college by students; and steps to make the campus carbon neutral and reduce GHG emissions.

5) Evidence of Success:

- Over 70% of the campus area is covered with greenery. This not only has helped maintain cooler climate but also in preservation and harmonious co-existence of avian and faunal biodiversity in the region.
- Increased use of bicycles and pedestal walkways for transit across campus
- Over 200 students have been sensitized and mobilized through SDG handprint lab, to employ their skills to strategize and work with community towards finding sustainable solutions.
- *NABL Accreditation of Environmental Engineering Laboratory:* This lab at M. S. Patel Department of Civil Engineering, CSPIT has been accredited in accordance with ISO/IEC 17025:2005 by the National Accreditation Board for Testing and Calibration Laboratories-NABL India in the field of Chemical testing (Water/ Wastewater/ Ambient Air/ Stack Emission/ Hazardous Wastes/ Noise) with total accredited 60 tests/ parameters. The accreditation is granted for two years and is valid till 25.11.2020.
- *Environmental Audit Cell:* CHARUSAT has been recognized as a Schedule –I Environmental Auditor by Gujarat Pollution Control Board from Sept. 2017. Since 2017, CHARUSAT has handled the Environment Audit of more than 120 big and medium industries across the Gujarat.
- Close to 35 % power demand of the campus is met through solar energy using maximum capacity as per government policy
- About 43 % rainwater is harvested at CHARUSAT campus
- As per Green Audit, 3.25 Tons CO2 emission/student/year, which is much lesser than average Indian and Global CO2 Emission by University Students
- Pilot projects have been undertaken to replace plastic with natural material bye developing bamboo bottles, jute bags and folders etc.
- Waste water and compositing plants are functionalized

6. Problems Encountered and Resources Required:

- Mass sensitization of youth about the significance of SDGs and public support is difficult
- More financial support is required to implement environment-friendly practices on a larger scale
- More structured interface for effective community involvement is necessary
- Innovative planned initiatives to be designed to engage faculty and students

Best Practice 2:

1. **Title of the Practice:**

Human Resource Development and People-First Approach

1. **Objectives of the Practice:**

- Empower the human resource as major core-capacity dimension by inculcating, enhancing and developing diverse competencies
- Create a work environment conducive for all the stakeholders enabling mutual growth and

development
- Achieve and sustain organizational goals through people-first approach

1. **The Context:**

CHARUSAT has identified three core performance areas to deliver as a responsible organization viz. (i) Research, Development and Innovation (ii) Teaching-Learning-Evaluation and (iii) Extension and Community Services. Human resource is realized as a major chassis driving the university's all-round growth and development. Rich human resource directly and indirectly associated with CHARUSAT includes employees including teaching and non-teaching staff, students, parents, donors and philanthropists, service providers and local community. The purpose of the human resource development towards achieving the organizational goals is manifold including achieving academic excellence, administrative efficiency and contributing its share as a responsible organization in societal uplift.

1. **The Practice:**

CHARUSAT steers the human resource enrichment through integration of liberalized HR policies, training for professional and personal improvisations and bottom-up leadership involving constituent institutes and its human resource components to actively contribute in decision making and institutional management. The goal is to foster a progressive, flexible, amicable yet dynamic work culture allowing a decent work-life balance. Directed efforts are extended through Prin. B I Patel Human Resource Development Centre (HRDC), Internal Quality Assurance Cell (IQAC), Charotar Rural Education Development Programme (CREDP) as well as through autonomous functions of its component institutes.

A continuous practice (individual or group centric), adopted involves following stages:

(i) I

(ii) Designing various initiatives to foster holistic talent development, annual scheduling and organizing the programs in a batchwise manner

(iii) Feedback and evaluation of the improvements through structured ways, hierarchical observations and interactions

Faculty development initiatives: Empowering the inherent and acquired potential of the faculty pool is quintessential. Constant emphasis and efforts to enhance the competency of faculty is ensured through

- 100 % academic autonomy and feedback-driven improvisations, enabling continuous enrichment of faculty capacities, outlook and the overall process
- Fostering professional development at two levels (i) polishing vocational, soft and communication

skills through induction/orientation programs and faculty development programs (FDPs) themed on counselling, professional etiquettes, spiritual discourses, education management, academic leadership; Competitive examination to improve language proficiency (English, French) etc. (ii) guidance and assistance for upgrading technical/scientific caliber through self-identified industry exposure and domain knowledge trainings, autonomy in choosing research areas and collaborations as well as full financial support for research-related activities through dedicated budget allocations.

- Incentivizing faculty members for their research outputs
- Active involvement of faculty members in management and administration

Student development initiatives: Students are dynamic and the most important human resource for any educational organization. CHARUSAT ensures holistic development of its students through

- Student-centric academic practices- curricula at par with national and international standards, blended learning-based pedagogy, outcome-based education, career development initiatives
- Fully funded industrial visits/clinical training/participation & paper presentations in seminars
- Orientation programs to facilitate smooth transition into higher education systems
- Ensuring socio-psychological and spiritual wellness through robust mentor-mentee system and spiritual discourses
- Facilitating multi-dimensional development through extracurricular activities and specialized courses on 'Liberal Arts' and 'Creativity, Problem solving and Innovation'
- Building teamwork and leadership skills through active involvement in management of routine academic processes, students clubs and community services
- Appreciating their academic achievements through prizes, scholarships and gold medals
- Discussing the students' progression through regular parents' meetings

Development initiatives for non-teaching staff

- Lab technicians are trained for building and maintaining digital records, instrument operations, efficient lab management and are involved in decision making
- Conducting motivational sessions on work-life balance, communication skills, etiquettes, importance of code of conduct
- Sensitizing attendants and supporting staff through healthcare awareness programs

Community development initiatives-As an Institutional-Social Responsibility, the long-term agenda is to build the capacity of the rural community and improve the socio-economic quality of life

- Educating and training the rural community through CREDP, CHARUSAT
- Encouraging and supporting girl child education through special scholarships and parents' counseling
- Equal opportunities and financial assistance for higher studies through philanthropy to support the progression of students from economically constrained background
- Sensitization camps, door-to-door surveys and community activities to promote personal and public hygiene, pre and postnatal maternal care, awareness on mental health, state-level antiaddiction drives, national level campaign like Swachha Bharat and Swasth Bharat, etc
- Employment and support to small-scale businesses for the local rural community
- Training to auto-rickshaw drivers, security personnel, food vendors etc.

Special initiatives during Covid pandemic

- Introducing work-from-home modules and flexi-timings for employees
- Full and timely salaries for employees; fees payment relaxations for students as a conscious effort to alleviate financial burdens
- Well-prepared, efficient and smooth shift to online academics through integration of IT in pedagogical innovations; well-proctored exams using *Exam-from-Home* module of customized softwares
- Door-to-door delivery of books to students; remote access to online learning resources
- Covid-care center set-up at CHARUSAT hospital in collaboration with Government of Gujarat
- Educating local community towards following lockdown protocols and preventive measures through NSS-CHARUSAT initiatives
- Vaccinating the frontline employees

5) Evidence of Success:

Faculty enrichment and staff mobilization

- More than 100 faculty members have been appreciated under Research Paper Awards Scheme
- Visibly enhanced multidisciplinary projects and inter-institutional collaborations
- HRDC-CHARUSAT has organized over 100 induction/developmental programs for enrichment of faculty, non-teaching and support staff, during last five years.
- Efforts to enhance domain knowledge and industry exposure has reflected in improvisation in academics, research and teacher-student relationships, as evident through feedback from the stakeholders. These efforts are appraised annually.
- The university has financially supported >400 faculty members for participation in national/international level workshops/symposia/conferences, through allocation of Rs. 20,000/- per faculty per year. Research projects worth ~1.3 Crores have been supported through seed grants.
- Organization of tech-fests, conferences/ symposia/webinars/STTPs/guest lectures/industrial visits as well as non-technical events like Convocations, University Foundation Day, Sports and Cultural festival etc. reflects the experience invested by well-groomed faculty in terms of quality of resource persons, content and smooth management.
- Around 115 non-teaching employees have been trained through 13 programs. Trained lab-technicians contribute to effective institutional management through additional roles like admission counseling, organization of various technical/non-technical events and other administrative duties
- Around 25 attendants trained through 5 programs are seen adopting a healthier lifestyle and attitude.

Student progression

- Almost all the first-year students benefited significantly from orientation programs
- Over 330 activities over last five years have benefited career development of ~5000 students annually.
- Academic progression, career prospects and overall wellbeing of every student has been facilitated through mentor-mentee interactions
- Merit-based scholar ships to >1520 students while 151 gold medals have been awarded through convocations in last five years
- Over 7030 and ~4730 students participated in courses on Liberal Arts and Creativity, Problem Solving and Innovations, respectively

Institutional-Social Responsibility

- Six villages-Mehlaav, Malataj, Kaloli, Ghuteli, Dethali Gada, have been adopted through CREDP
- Collaboration with Government of Gujarat for conducting clinics and health surveys
- Initiatives under Unnat Bharat Abhiyan to educate rural women over revoking the social stigma about gynecological issues and environment–friendly menstrual sanitation
- Small-scale businesses including tiffin services, hostel accommodation, pick-n-drop transport facilities, Xerox centers, food and beverage joints, general provision stores etc have been supported on-campus and in nearby areas.
- Over 85% of staff in house-keeping, security, gardening, canteen contracts and maintenance sectors of operations, are employed from the local rural community
- MoUs signed with ~72 schools to train staff/students/parents

Outputs in pandemic situations

- Successful adherence to academic calendar
- Number of research initiatives (paper publications/writing project proposals/webinars) significantly increased during the work-from-home schedules
- Online summer trainings were also organized for students
- Several students were supported financially for sustained education

6) Problems Encountered and Resources Required

Human resource development, although a massive determinant of organizational growth, is sensitive owing to diversity with respect to gender, socioeconomic backgrounds, educational qualifications and individual life goals. Following constraints and challenges are faced while implementing the developmental initiatives

Employee specific:

1. Addressing diverse needs of the faculty members, within limited training modules

2. Time constraints in scheduling trainings within the academic calendar, balancing with lesser quality time for innovations in academics and research

3. Availability of qualified resource persons with desired frequency and specializations

4. Tangible mapping of the outcomes and efficacy of training modules

5. Difficulties in motivating employees to engage in training and self-development and align with organizational vision and mission

Student specific:

1. Managing diversity of learning abilities and socio-economic background

2. Assimilating vernacular medium students into English medium education regime
3. Mobilizing students from the mindset of 'individualistic-learning' to 'peer-learning'

4. Tight academic schedules leaves less time for recreational activities

5. More financial resource flow required to support the meritorious but economically constrained students

Community specific:

1. Difficult convincing rural community over the long-term benefits of participating in university initiatives

2. Limited ventures for university-community partnerships restricts opportunities to explore the rural potential

3. A more focused collaboration under development initiatives by Government of India may help the university to propel rural development

File Description	Document
Best practices in the Institutional web site	[View Document](#)
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:

Towards following its vision, CHARUSAT has increasingly adopted the approach of research-driven teaching-learning and societal development. Active research culture is ingrained across the campus through integration of encouraging policies, simplified administrative procedures, infrastructural establishment and upgrade as well as human resource enrichment.

Qualified, trained and self-motivated human resource including faculty members, doctoral and post-doctoral students are key contributors to the research environment. University policy for recruiting faculty members is essentially driven towards attracting and retaining qualified individuals with a proven record in research. About 38% faculty members are PhD qualified; their research outputs are encouraged though career advancements. Currently 54% of faculty members at CHARUSAT are pursuing PhD. Academic and administrative flexibility is provided to support their progression. Diverse initiatives are undertaken to promote inter- and multidisciplinary research activities with a complete autonomy to choose research domains and collaborative partners. So far, 73 faculty members have been supported through CHARUSAT seed grants worth 130 lacs.

University Research Cell (URC), headed by Dean (Research) conceptualizes, improvises and implements various research-oriented policies and practices towards sensitization, promotion and inclusion of various stakeholders. Currently ~43 doctoral and 8 post-doctoral students are supported with fellowships and

contingency grants under CHARUSAT PhD Scholars' Fellowship (CPSF) and CHARUSAT-PDF-programme, respectively. URC ensures quality research outputs through devising mechanisms to constitute and functionalise Doctoral Advisory Committee and Internal Review Committee for periodic review and timely achievement of the academic milestones for doctoral students. University committees also look into recognizing PhD supervisors and facilitate research project funding. Presently, university has 178 supervisors in consonance with UGC norms. Initiatives like CHARUSAT Journal, SIRO recognition, MoUs and Institutional Ethics Committee, University Industry-Interaction Cell, financial support to pursue research nationally and internationally, further strengthen the research environment.

In a unique initiative towards propelling research endeavours, Dr K C Patel Research and Development Centre was established to foster focused research in multidisciplinary areas. Subsequently, CHARUSAT Space Research and Technology Centre (CSRTC) and International Centre for Cosmology (ICC) were also established to engage in research across identified thrust areas of national relevance. Diverse collaborative projects funded through government agencies, industries and philanthropy undertaken at these centres.

- KRADLE has successfully executed **16** projects worth **>500 lacs** INR. Over **17** PhD and **29** Masters level dissertation students from within and outside CHARUSAT have been trained so far. Seven students have benefitted through summer project while two international students have obtained domain-specific training. Besides, 486 students have been trained through STTPs and hands-on training programs here.
- CSRTC has implemented **14** projects worth around **2.27** crores INR; with about **26 %** of the fund invested by the University. Collaborative research with SAC-ISRO, IPR-BRNS, IRDE-DRDO and CRL-BEL has trained around **159** students so far.
- Research at ICC is focused in Astrophysics and Cosmology through various inter-institutional collaborations. Around 28 students from CHARUSAT and other colleges have been trained through dissertation projects while ~300 students have benefitted from specialized courses. The center boasts of an outstanding outreach through internship programs for >40 Post-docs, Doctoral, Masters' and Bachelor level students from TIFR, IIT-Kanpur, BITS-Goa, IIT-Mumbai, SVNIT-Surat to name a few. Students are exposed to the concepts of cosmology through a unique course in Astrophysics and an MoU with Dinsha Patel Planetarium.

University Sophisticated Instrumentation Facility has been developed to support advanced research. This includes the central instrumentation labs and specialized labs like Bhartiben and P R Patel Biological Research laboratory, Dr. S M Patel Research & Characterization, Aseptic lab, Molecular Diagnostics Lab, FESTO-Centre of Excellence, Centre of Excellence in AI, Supercomputing Lab, to name a few. Besides, the university has supported establishment of independent research labs for over 65 projects funded by government agencies like DST-SERB, DBT, CUJCOST, AICTE etc. across the constituent institutes. NABL accredited Analube lab and Environmental lab have been established to foster on-campus consultancy projects.

Undergraduate, postgraduate & doctoral students, post-doctoral fellows and faculties from different institutes on-campus and near vicinity, get an opportunity to obtain multi-disciplinary exposure in science and technology using these facilities; through emphatic implementation of in-house dissertation, multi-disciplinary projects, industrial projects, trainings and visits. In turn, this experience transpires into higher level of teaching-learning practices and better prospects in placement and higher studies. Some of the student project outcomes have yielded research publications and patents. Additionally, to enhance the research aptitude and inclination, CHARUSAT offers a unique course on "Creativity, Problem Solving and Innovation" to all the students. Students are also supported financially to present their research work in

various scientific/technical events.

Entrepreneurship Development and Incubation Cell (EDIC) and CHARUSAT Start-up & Innovation Centre have effectively strengthened entrepreneurial ecosystem by supporting 90 start-up projects and benefitting benefitted 1780+ students through various initiatives. Inception of CHARUSAT-IPR Facilitation Cell is to recognize and secure the novel ideas and outputs created through our intellectual assets.

Through these all-round inputs at CHARUSAT have translated into more than 1300 research publications, ~82 industrial consultancy projects worth >1.8 Crores successfully implemented on campus, 70 MoUs for diverse research activities, total of 12 patents (published and granted), 2 royalty agreements and over 460 research-oriented events organized to augment the research network. CHARUSAT has 3 researchers appearing in top 2% most-quoted scientists of the world (https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918) while one elected as TWAS fellow.

Conscious efforts are directed towards environmental amelioration and sustainability, through intra- and extramurally funded projects under National Mission for Clean Ganga (NMCG), mandates of SDG Handprint Lab, Environment Audit Scheme of Gujarat Pollution Control Boards and so on. Research & extension initiatives are also focussed on healthcare deliverables to improve quality of life in rural vicinity, including health surveys & camps in collaboration with Government of Gujarat and infrastructural setup like Covid-care centre and Molecular Diagnostic lab, recently. Increasing efforts are made to involve the local community in various research initiatives, as volunteers, facilitators or end-beneficiaries.

Ultimately, the infrastructural and intellectual capacity backed by appropriate administrative framework and socially-driven ideologies, contribute towards evolving as a research-oriented organization, determined to impart research-driven education, nurture skilled individuals and benefit the society through innovative solutions for better future.

File Description	Document
Any other relevant information	[View Document](#)

5. CONCLUSION

Additional Information :

1. CHARUSAT has been known for practicing **honesty** and **integrity**. It says what it does and does what it says.
2. Every year, it carries out free full-body **Health Checkup** of all employees and students.
3. It has been the practice at CHARUSAT to release the salaries of employees on the first day of the month. The same continued even during pandemic and lockdowns.
4. Looking to the grim scenario resulting from the lockdowns, in the interest of Students and Parents, CHARUSAT decided **not to hike fees** for the academic year 2020-21. Students were also given ease of Fees Payment through incremental payment options. They were also given financial aid.
5. Looking at the psychological well-being of the students and their families, Faculty Mentors regularly contacted the students for **counselling and support**.
6. CHARUSAT was one of the pioneering Universities to start **online education immediately** after Covid '19 outbreak. All syllabi were completed and examinations were held in time with timely declaration of results. This helped students with timely placements and higher education goals.
7. Students of Medical Sciences offered their services to Covid Patients. Also, the students and teachers extended their help and rendered services to the society to the best of their capacities.
8. Importantly, during the lockdown periods, **CHARUSAT NSS Volunteers** helped and supported the Government authorities in educating and counselling the masses for citizen friendly implementation of law and guidelines. The initiative was acknowledged by the PM Office on their social media platforms.
9. To aid online education, **CHARULAP scheme** was launched with the support of the Noble Philanthropists. 2000 Students were distributed highly subsidized high configured HP Laptops.
10. Despite all constraints resulting from Covid crisis, CHARUSAT did not **reduce the salary of any of the employees** including the daily wagers. No employee was lay-offed. Moreover, regular increments were duly released.
11. All recruitments were carried out even during pandemic. **Faculty promotions were also awarded**.
12. Despite all odds resulting from the Covid '19 surge, CHARUSAT complied with all NAAC submission processes of second cycle sustaining quality processes and continuing research and academics.

Concluding Remarks :

Over the years, CHARUSAT has been dedicating its efforts to cater to the educational needs of the society by creating an institution of eminence / excellence in **Charotar – the Land of Sardar Patel**.

As a result of all its endeavors, CHARUSAT has been recognized as a **leading centre for education** in Technology and Engineering, Management, Pharmacy, Applied Sciences, and Medical & Paramedical Sciences.

"A" Grade by NAAC in the very first cycle, high Ranking in National Institutional Ranking Framework & State Rankings and in-principle award of the **Centre of Excellence** by Government of Gujarat validate the recognition gained by CHARUSAT and its constituent Institutes.

Industry collaborations and support including encouraging students' **Placements** indicate the success achieved by CHARUSAT. It also shows the high degree of acceptance of the students of this University by the

industry.

With the belief that University is for all, CHARUSAT has generated employment opportunities for more than 1000 unskilled labors of nearby vicinity. Further, *CHARUSAT Rural Education Development Program (CREDP)* has benefitted 80,000 students, 1500 teachers, 80 Management representatives of Rural Schools, and 800 parents.

NABH accredited Multispecialty CHARUSAT Hospital has served around 2.5 lakhs needy persons through various healthcare – preventive and curative initiatives including Outreach Activities.

With this background, mapping its plan for growth and development, CHARUSAT has charted **Road Map**. Initially, **it aims to be amongst top 20 universities at National Level** by exploring new horizons and frontiers of Knowledge, Research and Innovations. In the long run, CHARUSAT fosters an aspiration of being a **World Class University**. CHARUSAT wishes to achieve it through hybrid culture: A culture that represents the serenity of the oldest places of learning like *Takshashila* and *Nalanda* and the scholarship of the centres like Harvard and Stanford.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification

1.1.2	**Percentage of Programmes where syllabus revision was carried out during the last five years.**
	
	    1.1.2.1. **How many Programmes were revised out of total number of Programmes offered during the last five years**
	        Answer before DVV Verification : 61
	        Answer after DVV Verification: 53
	    1.1.2.2. **Number of all Programmes offered by the institution during the last five years.**
	        Answer before DVV Verification : 61
	        Answer after DVV Verification: 53
	
	    Remark : DVV has made the changes as per IIQA.

1.2.2	**Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).**
	
	    1.2.2.1. **Number of Programmes in which CBCS / Elective course system implemented.**
	        Answer before DVV Verification : 56
	        Answer after DVV Verification: 53
	
	    Remark : DVV has made the changes as per IIQA.

1.4.1	**Structured feedback for design and review of syllabus – semester-wise / year-wise is received from**
	
	1) Students, 2) Teachers, 3) Employers,
	
	 4) Alumni
	
	        Answer before DVV Verification : A. All 4 of the above
	        Answer After DVV Verification: D. Any 1 of the above
	    Remark : DVV has made the changes as per provided feedback report of Department by HEI.

1.4.2	**Feedback processes of the institution may be classified as follows:**
	
	        Answer before DVV Verification : A. Feedback collected, analysed and action taken and feedback available on website
	        Answer After DVV Verification: E. Feedback not collected
	    Remark : Feedback analysed report and action taken report has not provided by HEI.

2.4.4	**Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years** 2.4.4.1. **Number of full time teachers receiving awards from state /national /international**

level from Government/Govt. recognized bodies year wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
89	28	42	24	17

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
80	20	42	24	17

Remark : DVV has not consider provided certificate of appreciation by HEI.

2.5.2 | **Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years**

2.5.2.1. **Number of complaints/grievances about evaluation year wise during the last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
275	402	405	413	202

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
265	404	415	403	200

3.2.1 | **Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).**

3.2.1.1. **Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
106.38	66.02	104.32	106.73	14.47

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
16.38	6.02	7.32	41.73	10.47

Remark : DVV has made the changes as per provided report by HEI.

3.3.3	**Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.**
	3.3.3.1. Total number of awards / recognitions received for *research /* innovations won by institution / teachers / research scholars / students year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
243	100	37	15	14

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
123	57	26	9	10

3.5.2	**Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).**
	3.5.2.1. Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
118.73	57.80	9.66	0.65	0.79

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
98.2	57.80	9.66	0.65	0.79

3.6.2	**Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years**
	3.6.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
16	8	9	8	7

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
1	1	2	1	0

	Remark : DVV has not consider days activities and local awards by HEI.
3.6.3	**Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs).**

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
98	158	187	126	71

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
87	138	166	106	57

Remark : DVV has not consider days activities and indian festivals by HEI.

3.6.4	**Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years**

3.6.4.1. **Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
11609	17439	16841	12791	3952

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
5794	11852	9928	5003	3952

Remark : DVV has not consider those students participated in days activities and indian festivals by HEI.

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

4.1.4.1. **Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1382.90	959.17	1268.30	999.16	1070.01

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
1358.85	925.46	1220.37	947.95	1030.85

Remark : DVV has given the input as per exclude books from audited statement of Expenditure for infrastructure augmentation, excluding salary by HEI.

4.2.4	**Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year** 4.2.4.1. **Number of teachers and students using library per day over last one year** Answer before DVV Verification : 876 Answer after DVV Verification: 175 Remark : DVV has made the changes as per average of teacher and students using library per day on (dates)
4.3.4	**Available bandwidth of internet connection in the Institution (Leased line)** Answer before DVV Verification : A. ?1 GBPS Answer After DVV Verification: B. 500 MBPS - 1 GBPS Remark : DVV has made the changes as per provided bill by HEI.
5.3.1	**Number of awards / medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) during the last five years.** 5.3.1.1. **Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.** Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
41	32	30	25	26

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
29	26	22	16	19

5.3.3	**Average number of sports and cultural events / competitions organised by the institution per year**

5.3.3.1. **Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
71	69	71	66	57

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
63	63	65	60	52

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** Answer before DVV Verification : A. All of the above Answer After DVV Verification: B. 3 of the above Remark : DVV has made the changes as per provided report by HEI.

2.Extended Profile Deviations

ID	Extended Questions
1.1	**Number of programs offered year-wise for last five years** Answer before DVV Verification: _table below_

2019-20	2018-19	2017-18	2016-17	2015-16
56	58	58	54	49

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
53	53	46	45	39

2.2	**Number of outgoing / final year students year-wise during last five years** Answer before DVV Verification: _table below_

2019-20	2018-19	2017-18	2016-17	2015-16
1855	1926	1856	1817	1654

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1860	1959	1883	1854	1694

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
686	686	656	629	595

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
700	700	665	641	551