

PART-A: PROFILE OF THE INSTITUTE

Name of the Program Applied for: B.E. Rubber Technology

A1: Name of the Institute

Name of Institute	L. D. College of Engineering, Ahmedabad
Year of Establishment	1948
Location	Ahmedabad, Gujarat

A2: Institute Address

Address	L.D.College of Engineering No.120, Circular Road, University Area, Opp Gujarat University, Navrangpura		
City	Ahmedabad	State	Gujarat
Pin Code	380015	Website	www.ldce.ac.in
E-mail	head_chemical@ldce.ac.in	Phone No	+91-79-26306752

A3: Name and address of the Affiliating University

University	Gujarat Technological University	City	Ahmedabad
State	Gujarat	Pin Code	382424

A4: Type of the Institution

Government institute

A5: Ownership Status

State Government

A6: Programs Offered by the Institution

No. of UG programs: 16

No. of PG programs: 19

Table No. A6.1: List of all programs offered

S.N.	Level of program (UG/PG)	Name of the program	Year of Start	Year of close	Name of the Department
1	UG	Artificial Intelligence and Machine Learning	2022-23	--	Artificial Intelligence and Machine Learning
2	UG	Automobile Engineering	2004	--	Department of Automobile Engineering
3	UG	Biomedical Engineering	2004	--	Department of Biomedical Engineering

4	UG	Chemical Engineering	1974	--	Department of Chemical Engineering
5	UG	Civil Engineering	1948	--	Department of Civil Engineering
6	UG	Computer Engineering	1983	--	Department of Computer Engineering
7	UG	Electrical Engineering	1948	--	Department of Electrical Engineering
8	UG	Electronics & Communication Engineering	1972	--	Department of Electronics & Communication Engineering
09	UG	Environmental Engineering	1983	--	Department of Environmental Engineering
10	UG	Information Technology	2000	--	Department of Information Technology
11	UG	Instrumentation & Control Engineering	1974	--	Department of Instrumentation & Control Engineering
12	UG	Mechanical Engineering	1948	--	Department of Mechanical Engineering
13	UG	Plastic Technology	1983	--	Department of Plastic Technology

14	UG	Robotics & Automation (B.E.)	2022-23	--	Department of Robotics & Automation
15	UG	Rubber Technology (B.E.)	1983	--	Department of Rubber Technology
16	UG	Textile Technology (B.E.)	1977	--	Department of Textile Technology
17	PG	Computer Aided Process Design (M.E.)	2002	--	Department of Chemical Engineering
18	PG	Geotechnical Engineering (M.E.)	2011	--	Department of Applied Mechanics
19	PG	Civil (Structural Engineering) (M.E)	1986	--	Department of Applied Mechanics
20	PG	Civil Engineering (Transportation Engineering) (M.E.)	2001	--	Department of Civil Engineering
21	PG	Civil (Water Resources & Engineering) (M.E.)	1986	--	Department of Civil Engineering
22	PG	Computer Engineering (Software Engineering) (M.E.)	2009	--	Department of Computer Engineering
23	PG	Electrical Engineering (M.E.)	1954	--	Department of Electrical Engineering

24	PG	Electronics and Communication (Communication System Engineering) (M.E.)	2001	--	Department of Electronics & Communication Engineering
25	PG	Environmental Management (M.E.)	2001	--	Department of Environment Engineering
26	PG	Information Technology (M.E.)	2010	--	Department of Information Technology
27	PG	Applied Instrumentation (M.E.)	2003	--	Department of Instrumentation & Control Engineering
28	PG	Computer Aided Design & Manufacturing (M.E.)	1996	--	Department of Mechanical Engineering
29	PG	Cryogenic Engineering (M.E.)	1990	--	Department of Mechanical Engineering
30	PG	Mechanical (Internal Combustion Engines & Automobile) (M.E.)	2003	--	Department of Mechanical Engineering
31	PG	Rubber Technology (M.E.)	2011	--	Department of Rubber Technology
32	PG	Textile Engineering (M.E.)	2010	--	Department of Textile Technology
33	PG	VLSI Design (M.E.)	2021	--	Department of Electronics & Communication Engineering

34	PG	Electric Vehicle Technology (M.E.)	2023	--	Department of Electrical Engineering
35	PG	Masters in Computer Application (M.C.A)	1987	--	Department of Information Technology
36	UG (Working Professional)	Civil Engineering (B.E.)	2024-25	--	Department of Civil Engineering
37	UG(Working Professional)	Electrical Engineering (B.E.)	2024-25	--	Department of Electrical Engineering
38	UG(Working Professional)	Mechanical Engineering (B.E.)	2024-25	--	Department of Mechanical

A7: Programs for Accreditation

Table No. A7.1 Programs considered for accreditation

Department	Allied Depts	Program Name	Level
Mechanical Engineering	Yes	Mechanical Engineering	UG
Electronics & Comm Engg	Yes	Electronics & Comm Engg	UG
Environmental Engineering	Yes	Environmental Engineering	UG
Rubber Technology	No	Rubber Technology	UG

Table No. A7.2: Allied Departments

No allied departments/clusters exist for this program

PART-B: PROGRAM INFORMATION

(Data for B.E. Rubber Technology)

B1: Provide the Required Information for the Program Applied For:

Sr.No	Program name	Program applied level	Year of start	Sanct . Intake	Increase/ Decrease	Year of Increase	Current Intake	Year of AICTE Approval	AICTE/Competent authority approval details	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	B.E. Rubber Tech	UG	1983	30	Yes	2009	30	2009	F.No.:Central/1-44642961216/2025/EOA, 03-Jan.-2025	Granted accreditation for 3 years for the period (specify period)	2023	2026	2	4

Table No. B1: Program details. A. List of the Programs Offered by the Department:

B2: Detail of Head of the Department for the program under consideration:

Name of HoD	Dr. R. N. Desai
Nature of Appointment	Regular
Qualification	Ph.D.

B3: Program Details

Item	CAY 2025-26	CAYm1 2024-25	CAYm2 2023-24	CAYm3 2022-23	LYG 2021-22	LYGm1 2020-21	LYGm2 2019-20
N = Sanctioned Intake	30	30	30	30	30	30	30
N1 = Students admitted (net)	30	29	13	5	18	30	30
N2 = Lateral entry	0	4	13	9	14	9	7
N3 = Separate division	0	0	0	0	0	0	0
N4 = Supernumerary	6	0	0	0	0	0	4
Total (N1+N2+N3+N4)	36	33	26	14	32	39	41

Table No.B3.1: Admission details for the program excluding those admitted through multiple entry and exit points.

B4: . Enrolment Ratio in the First Year

Item	CAY 2025-26	CAYm1 2024-25	CAYm2 2023-24
N = Sanctioned Intake	30	30	30
N1 = Students admitted	36	29	13
N4 = Supernumerary	-	-	-
ER = (N1+N4)/N * 100	120.00	96.67	43.33

Average ER = (ER1 + ER2 + ER3)/3 = 86.67

B5: Success Rate of the Students in the Stipulated Period of the Program

Item	LYG 2021-22	LYGm1 2020-21	LYGm2 2019-20
A* = Students admitted (batch)	32	39	41
B = Graduated in stipulated period	27	36	35
SR = (B/A)*100	84.38	92.31	85.37

Average SR = (SR1 + SR2 + SR3)/3 = 87.35

B6: Academic Performance of the First-Year Students of the Program

Academic Performance	CAYm1 2024-25	CAYm2 2023-24	CAYm3 2022-23
X = Mean CGPA (10-pt scale)	4.56	3.08	1.86
Y = Total successful students	29	13	5
Z = Total appeared	29	13	5
API = X*(Y/Z)	4.56	3.08	1.86

Average API = (API1 + API2 + API3)/3 = 3.17

B7: Academic Performance of the Second Year Students of the Program

Academic Performance	CAYm1 2024-25	CAYm2 2023-24	CAYm3 2022-23
X = Mean CGPA (10-pt scale)	5.92	4.95	5.66
Y = Total successful students	26	14	38
Z = Total appeared	26	14	38
API = X*(Y/Z)	5.92	4.95	5.66

Average API = (API1 + API2 + API3)/3 = 5.51

B8: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 2024-25	CAYm2 2023-24	CAYm3 2022-23
X = Mean CGPA (10-pt scale)	6.16	7.16	7.43
Y = Total successful students	12	31	36
Z = Total appeared	14	38	39
API = $X*(Y/Z)$	5.28	5.84	6.86

Average API = $(API1 + API2 + API3)/3 = 5.99$

B9: Placement, Higher Studies & Entrepreneurship (Table B9.1)

Item	LYG 2021-22	LYGm1 2020-21	LYGm2 2019-20
FS = Total final year students	27	36	35
X = Students placed	24	34	27
Y = Higher studies	3	1	5
Z = Entrepreneurship	-	1	2
X + Y + Z	27	36	34
Placement Index P = $((X+Y+Z)/FS)*100$	100.00	100.00	97.30

Average Placement Index = $(P1 + P2 + P3)/3 = 99.04$

PART-C: FACULTY DETAILS IN DEPARTMENT AND ALLIED DEPARTMENTS

C1: Faculty Details of Department (Table C1)

Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID* (if any)	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular / Contract / Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	R. N. Desai	AEDPD3209H	NA	Ph.D	Gujarat Technological University	CAPD	16/02/1991	34.11	Lecturer	Associate Professor	21/02/2009	Regular	Yes		Yes
2	A. D. Bhatt	AMTPB8934B	NA	M.E.	Gujarat Technological University	CAPD	01/05/2007	18.8	Assistant Professor	Assistant Professor		Regular	Yes		No
3	B. D. Patel	CEVPP0475H	NA	M.E.	Gujarat Technological University	Rubber Technology	24/06/2014	11.6	Assistant Professor	Assistant Professor		Regular	Yes		No
4	S. J. Padhiyar	ASUPP7456M	NA	M.E.	Gujarat Technological University	Rubber Technology	26/06/2014	11.6	Assistant Professor	Assistant Professor		Regular	Yes		No
5	G. G. Bhatt	BQXPB5184L	NA	M.E.	Gujarat Technological University	Rubber Technology	23/03/2017	8.9	Assistant Professor	Assistant Professor		Regular	Yes		No
6	R.Y. Modan	AQPPM4093G	NA	M.E.	Gujarat Technological University	Rubber Technology	21/10/2013	12.2	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No

Table C2: Allied Department Faculty - No allied departments exist.

C2: Student-Faculty Ratio (SFR) - Table C2.1

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

B= No. of Students in UG 2nd year (ST)

C= No. of Students in UG 3rd year (ST)

D= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio (**SFR**) = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)= Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

UG

No. of UG Programs in the Department1 No. of PG Programs in the Department1

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	33	33	33
UG1.C	33	33	33
UG1.D	33	33	33
UG1: Rubber Technology	99	99	99
PG1.A	18	18	18
PG1.B	18	18	18
PG1: Rubber Technology	36	36	36
DS=Total no. of students in all UG and PG programs in the Department	135	135	135
AS=Total no. of students of all UG and PG programs in allied departments	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	S1= 135	S2= 135	S3= 135
DF=Total no. of faculty members in the Department	6	6	6

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 6	F2= 6	F3= 6
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 22.50	SFR2= 22.50	SFR3= 22.50
Average SFR for 3 years	SFR= 22.50		

C3: Faculty Qualification (Table C3.1)

Year	X (Ph.D.)	Y (M.E./M.Tech)	RF (S/20)	FQI = 2.5*[(10X+4Y)/RF]
CAY (2025-26)	1	5	6.00	12.50
CAYm1 (2024-25)	1	5	6.00	12.50
CAYm2 (2023-24)	1	5	6.00	12.50

Average FQI = 12.50

Faculty qualification index (FQI) = $2.5 * [(10X + 4Y)/RF]$ where X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms. Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms. RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

C4: Faculty Cadre Proportion (Table C4.1)

Year	Professors		Associate Professors		Assistant Professors	
	Required	Available	Required	Available	Required	Available
CAY (2025-26)	1.00	0.00	1.00	1.00	4.00	4.00
CAYm1 (2024-25)	1.00	0.00	1.00	1.00	4.00	4.00
CAYm2 (2023-24)	1.00	0.00	1.00	1.00	4.00	4.00
Average Numbers	1.00	0.00	1.00	1.00	4.00	4.00

Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3) RF1= No. of Professors required = $1/9 \times \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:}$. RF2= No. of Associate Professors required = $2/9 \times \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:}$. RF3= No. of Assistant Professors required = $6/9 \times \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:}$. Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

C5: Visiting/Adjunct Faculty/Professor of Practice (Table C5.1)

CAYm1 (2024-25) - Total Hours: 96

Sr. No.	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Reclaimed Rubber & Its Technology	32
2	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Thermoplastics Elastomers and Polymer Blends	16
3	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Latex Technology	16
4	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Rubber Physics & Its Thermodynamics	16
5	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Rubber Plant and Process Engineering	16

CAYm2 (2023-24) - Total Hours: 80

Sr. No.	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled

1	Mr. Atul Shah	Managing director	Pioneer Industries	Rubber Plant and Process Engineering	32
2	Mr. Ronak Panchal	Managing director	Pravin Rubber and Engineering	Reclaimed Rubber & Its Technology	32
3	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Rubber Compounding Materials	16
4	Mr. Ankit Vandra	Senior Technical Executive	Ami Polymers Pvt. Ltd.	Weathering of Rubbers	16

CAYm3 (2022-23) - Total Hours: 64

Sr. No.	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Atul Shah	Managing director	Pioneer Industries	Rubber Plant and Process Engineering	16
2	Mr. Atul Shah	Managing director	Pioneer Industries	Belt Hose and Footwear Technology	16
3	Mrs. Trupti Kothari	Former Assistant Professor	L.D.College of engineering	Reclaimed Rubber & Its Technology	32

C6: Academic Research (Table No. C6.1: Faculty publication details.

Sr. No.	Item	CAYm1 (2024-2025)	CAYm2 (2023-2024)	CAYm3 (2022-2023)
1	No. of peer reviewed journal papers published	04	04	01
2	No. of peer reviewed conference papers published	03	00	00
3	No. of books/book chapters published	02	00	00

C7: Sponsored Research Projects (Table C7.1)

S.N.	PI name	Co-PI names if any	Name of the Dept., where Project sanctioned	Project title*	Name of the Funding agency	Duration of the project	Amount (Lacs)
CAYm1 (2024-2025)							
1	Dhruv kumar Patel	Prof. G.G.Bhatt	I-Hub	Development of Silicon Rubber	I-Hub	2	7Lacs
Amount received (Rs.)							7Lacs
CAYm2 (2023-2024)							
1	NIL	NIL	NIL	NIL	NIL	NIL	0
Amount received (Rs.)							
CAYm3 (2022-2023)							

1	Daxit soni	Prof. Gnanu G Bhatt	I Hub	Defence- Storage of FOL in Operational Conditions	I Hub	2	1.50
Amount received (Rs.)							1.50
Total Amount (Lacs) Received for the Past 3 Years							8.50

C8: Consultancy Work (Table C8.1)

Sr.No.	Name of Faculty	Industry	Technical Guidance	Year	Amount
1	Prof. (Dr.) R.N.Desai and Prof. G.G.Bhatt	N.B Commercial Enterprises Limited	Recommended Material for O-ring Application	2024	10,000/-

C9: Institution Seed Money or Internal Research Grant to its Faculty for Research Work

S.N.	Faculty name	Project title/ Support Activity	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1(2024-2025)						
1	Prof. S.J.Padhiyar	SUSTAINABLE REINFORCEMENT OF RUBBER COMPOUND USING RECYCLED PET (POLYETHYLENE TEREPHTHALATE) Re-Viver	02 Years	1Lacs	1Lacs	Paper publication, Publication of patent
Amount received (Rs.)						
CAYm2(2023-2024)						
1	Prof.S.J.Padhiyar, Prof.B.D. Pate	Preparation of Industrial gloves with electrical insulation for human safety	03 Years	0.3 Lacs	0.05 Lacs	Prototype of Gloves
2	Prof. G.G. Bhatt	Enhancement of Property and Service Performance in Bellows	02 Years	0.3 Lacs	0.1 Lacs	Prototype of Bellow
3	Prof. G.G. Bhatt	Reformulation of Tyre Tread Compound to reduce drag force	02 Years	1.5 Lacs	0.80	Prototype of tire tread
Amount received (Rs.)						
CAYm3(2022-2023)						
1	NIL	NIL	NIL	NIL	NIL	NIL
Amount received (Rs.)						
Total amount (Lacs) received for the past 3 years					3.10 Lacs	

PART-D: LABORATORY INFRASTRUCTURE IN THE DEPARTMENT

D1 Adequate and Well-Equipped Laboratories, and Technical Manpower

S. N.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the major equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1	Chemistry	20	pH meter, Conductivity Meter, Hot air Oven, Muffle furnace	8 Hrs.	Mr. A. M. Rathod	Lab Assistant	B.E. Chemical
2	Rubber Technology (RT)	20	pH Meter, Sound level meter	8 Hrs.	Mr. A. M. Rathod	Lab Assistant	B.E. Chemical
3	Latex Technology (LT)	20	pH Meter, Jar Mill, Planetary Mixer, Mechanical Stability Time Apparatus, Hardness Tester for Foam Rubber	8 Hrs.	Mr. A. M. Rathod	Lab Assistant	B.E. Chemical
4	Rubber Physics and Thermodynamics (RP and T)	20	Compression Set Assembly, Sound Meter, Numerical based problems are	4 Hrs.	Mr. V H Hukmani	Lab Assistant	HSC

			given to explain the concept of Rubber Physics and Thermodynamics, S				
5	Rubber Engineering and Economics	20	Two Roll Mill. Extruder, Calender, Hydraulic Press, Rubber, Moulds for different products, Autoclave	4 Hrs	Mr. V H Hukmani	Lab Assistant	HSC
6.	Rubber Compounding Materials	20	Melting Point Apparatus, Hot Air Oven, Muffle Furnace, Tapped Density Meter, Colud and Pour point apparatus	6 Hrs	Mr. V H Hukmani	Lab Assistant	HSC
7.	Rheology of Rubber	20	Ostwald Viscometer, Mooney Visometer	4 Hrs	Mr. V H Hukmani	Lab Assistant	HSC
8	Vulcanization	20	Hydraulic Press, Autoclave, Oscillating Disc Rheometer, Rubber	8 Hrs	Mr. V H Hukmani	Lab Assistant	HSC

			moulds				
9	Textile and Metal Reinforcement of Elastomer (TMRE)	20	Peel Tester	6 Hrs	Mr. A. M. Rathod	Lab Assistant	B.E. Chemical
10	Rubber Adhesion and Adhesion Science	20	Adhesion Tester	4 Hrs	Mr. A. M. Rathod	Lab Assistant	B.E. Chemical
11	Rubber Compound and Product Testing	20	Universal Tensile Testing Machine, Shore-A Durometer, Shore-D Durometer, Ozone Test Chamber, IRHD Test Apparatus, Surface Immersion Apparatus	6 Hrs	Mr. A. M. Rathod	Lab Assistant	B.E. Chemical
12	Rubber Equipment Design	20	Numerical based equipment design and its drawings are carried out, Equipment are not required in this	6 Hrs	Mr. V H Hukmani	Lab Assistant	HSC

			laboratory				
13	Tyre and Tube Technology	20	Universal Tensile Testing Machine, Hot Air Oven	4 Hrs	Mr. V H Hukmani	Lab Assistant	HSC
14	Belt, Hose Footwear Technology	20	Ross-Flexing Machine, Universal Tensile Testing Machine	4 Hrs	Mr. V H Hukmani	Lab Assistant	HSC

D2: Safety Measures in Laboratories

Sr. No.	Name of the Laboratory	Specific Safety Measures	Common Safety Facilities Available
1	Rubber Technology	Machine guarding, emergency stop switches	Apron, Fire extinguisher, First aid kit, Safety signage, Proper ventilation
2	Rubber Compounding Materials	Dust extraction, chemical storage cabinets	Apron, MSDS display, Fire safety system, Emergency exit
3	Latex Technology	Spill trays, anti-slip flooring	Apron, Eye wash facility, Ventilation, First aid
4	Rubber Compound & Product Testing	Guarded testing machines	Electrical grounding, Apron, Fire extinguisher
5	Vulcanisation	Heat resistant gloves, pressure safety valves	Temperature alarms, Apron, Emergency shutdown
6	Rubber Engineering & Its Economics	Electrical & ergonomic safety	UPS protection, Fire extinguisher
7	Tyre & Tube Technology	Rotating equipment protection	Safety shoes, Emergency switches
8	Belt, Hoses & Footwear	Cutting tool protection	Ventilation, Apron, First aid
9	Synthetic Rubbers	Solvent handling & fume hood	Chemical storage norms, Fire safety
10	High Performance Elastomers	Controlled chemical handling	Apron, Exhaust system
11	Engineering Rubber Products	Lockout-tagout procedures	Machine safety guards
12	Rubber & Latex Products	Steam & heating protection	Apron, Emergency exit

13	Reverse Engineering & Analysis	Sample cutting safety	Dust extraction, Electrical safety
14	Textile & Metal Reinforcement	Wire handling protection	Gloves, Eye protection
15	Toxicity & Safe Handling of Rubber Chemicals	Chemical labeling & toxicity control	Fume hood, Eye wash, MSDS
16	Thermoplastic Elastomers & Polymer Blends	Extruder safety interlocks	Heat warning systems
17	Polyurethanes Technology	Isocyanate handling protocol	Respirators, Spill kits

D3: Project Laboratory/Research Laboratory

Sr. No.	Name of Laboratory / Facility	Purpose & Activities	Major Facilities Available	Outcomes Supported
1	Project Development Laboratory	UG/PG major & minor projects, prototype fabrication	Mixing mill, compression molding setup, testing instruments	Student product development & design skills
2	Advanced Rubber Research Laboratory	Research on novel elastomer systems and blends	Rheometer, curing analysis tools, material characterization setup	Publications & research outcomes
3	Polymer Innovation & Product Design Laboratory	Innovative rubber product design	CAD software, design tools, prototyping facilities	Innovation & patent development
4	Centre for Elastomer Technology (CoE)	Industry-oriented research & consultancy	Advanced processing & testing facilities	Industry collaboration & consultancy
5	Reverse Engineering & Failure Analysis Laboratory	Product benchmarking & failure investigation	Microscopy, hardness & ageing analysis	Industrial problem solving
6	Startup & Innovation Laboratory	Student innovation and entrepreneurship activities	Prototype workspace, fabrication tools	Startup incubation support
7	Sustainable Elastomer Research Laboratory	Recycling & green rubber technology research	Devulcanization & waste utilization setup	Sustainable technology development
8	Computational Rubber Engineering	Simulation & numerical modeling projects	MATLAB/ANSYS-based analysis systems	Digital engineering capability

	Laboratory			
9	Industry Collaborative Research Facility	Sponsored industrial projects	Specialized compound preparation & testing	Consultancy & funded research
10	Product Testing & Validation Research Facility	Performance validation of developed products	Mechanical & thermal testing instruments	Prototype validation

PART-E: FIRST YEAR FACULTY AND FINANCIAL RESOURCES

E1: First Year Student-Faculty Ratio (FYSFR) - Table E1.1

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members $((NS1*0.8) + (NS2*0.2)) / (\text{No. of required faculty (RF4)})$; Percentage= $((NS1*0.8) + (NS2*0.2)) / RF4$
CAY 2025-26	1350	68	23	123	$(23*0.8+123*0.2) *100/68 = 63.24$
CAYm1 2024-25	1350	68	20	126	$(20*0.8+126*0.2) *100/68 = 60.59$
CAYm2 2023-24	1350	68	22	108	$(22*0.8+108*0.2) *100/68 = 57.65$
Average Percentage					60.49 (3 marks)

E2: . Budget Allocation, Utilization, and Public Accounting at Institute Level

Items	Budget ed in CFY	Actual expens es in CFY (till 31/01/2026)	Budget ed in CFYm1	Actual Expens es in CFYm1	Budget ed in CFYm2	Actual Expens es in CFYm2	Budget ed in CFYm3	Actual Expens es in CFYm3
Infrastructure Built-Up	1418.08	1418.08	2085.54	2085.54	2317.42	2317.42	1509	1509
Library	14.82	1.61	92.42	80.01	2.86	2.09	6.61	0.16
Laboratory equipment	927.97	367.66	1634.21	153.18	808.46	99.88	263.43	37.97
Teaching and non-teaching staff salary	8358	7914	6699	6697	6716	6710	5643.24	5641.23
Outreach Programs	11.41	11.41	8.3	8.28	7.93	7.78	8.29	7.90
R&D	88.87	88.87	77.47	77.47	74.58	74.58	78.22	78.22
Training, Placement and Industry linkage	3.35	3.35	6.00	6.00	3.00	3.00	2.24	2.24
SDGs	23.32	23.32	15.11	15.11	8.44	8.44	5.66	5.66
Entrepreneurs hip	3.09	3.09	0.97	0.97	7.07	7.07	2.09	2.09

Others (Office Expenses, Services, maintenance, Miscellaneous, etc. from IFMS and PLA which are not designates in above heads)	1282.24	1124.24	1368.23	1301.23	937.53	932.53	784.04	756.93
Total amount	12131.16	10955.64	11987.25	10424.79	10883.29	10162.79	8302.81	8041.39

E3: Budget Allocation, Utilization, and Public Accounting at Program Specific Level

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory Equipment	74	29	8	2	2.78	0.15	1.48	0.77
Software	1.75	1.75	0	0	0	0	0	0
SDGs	0.4256871029	0.4256871029	0.2946154679	0.2946154679	0.1712610852	0.1712610852	0.1055912863	0.1055912863
Support for faculty	141.12	141.12	116.62	116.62	107.24	107.24	101.54	101.54

development								
R & D	0.001	0.001	7	5	0.02	0.02	1.5	1.5
Industrial training, Industry expert, Internship	0.05	0.05	0.04	0.04	0.05	0.05	0.02	0.02
Misc. Expenses	23.40175 906	21.91981 683	26.676886 55	25.3705 6072	19.0239 6441	18.9225 0643	14.63974 357	14.13354 025
Total amount	240.748	194.266	158.631	149.325	129.285	126.553	119.285	118.069

R.N. Desai
Head of the Department
Dr.R.N.Desai

NKB
Institute NBA Coordinator
Dr.Ketan Badgular

Nilay
Principal
Dr.Nilay Bhuptani

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