



First Year Teaching Scheme

Admission Year 2026-27

**Diploma Engineering
Biotechnology**

Faculty of Engineering & Technology

Parul University

Vadodara, Gujarat, India

Semester – 1

				Teaching Scheme			Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
				(Hours / Week)										
NCrF Credit Level	Subject Code	Subject Name	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.	
4.5	03063001P C01	Fundamentals of Biotechnology and Microbiology	5	4	2	0	20	50	20	60	-	40	20	150
	03069101B S01	Mathematics - I	4	3	0	1	20	-	20	60	-	40	-	100
	03069501B S01	Applied Chemistry	4	3	2	0	20	50	20	60	-	40	20	150
	03062001E S01	Fundamentals of Computer Applications and Web Technologies	4	2	4	0	20	100	20	60	-	40	40	200
	03061901E S03	Engineering Workshop	2	0	4	0	-	100	-	-	-	-	40	100
	03060001H M01	Fundamentals of Communication Skills	1	0	2	0	-	20	-	-	30	-	20	50
	03061501M C01	Environmental Science	0	1	0	0	20	-	20	-	-	16	-	40
	03061501U E01	Pollution Prevention and Control Techniques	3	3	0	0	20	-	20	60	-	40	-	100
	03061601U E01	Programming with Python	3	2	2	0	20	50	20	60	-	40	20	150
	03061601U E02	Internet of Things: Concepts and Application	3	2	2	0	20	50	20	60	-	40	20	150
	03061701U E01	Energy Conservation	3	3	0	0	20	-	20	60	-	40	-	100
	03061901U E01	Introduction to Robotics and Automation	3	3	0	0	20	-	20	60	-	40	-	100
	03062301U E01	Basic Aircraft Science	3	3	0	0	20	-	20	60	-	40	-	100
Total credits			23											

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical

Theory Passing % : 40 Practical Passing % : 40

Semester – 2

NCrF Credit Level	Subject Code	Subject Name	Credit	Teaching Scheme			Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
				(Hours / Week)	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	
4.5	03063002P C01	Cell and Molecular Biology	5	4	2	0	20	50	20	60	-	40	20	150
	03069102B S01	Mathematics - II	4	3	0	1	20	-	20	60	-	40	-	100
	03069502B S01	Organic Chemistry	4	3	2	0	20	50	20	60	-	40	20	150
	03069202B S01	Basic Physics	4	3	2	0	20	50	20	60	-	40	20	150
	03060002H M01	Verbal Ability	2	1	2	0	40	20	-	60	30	40	20	150
	03060002M C01	Universal Human Values	0	1	0	0	20	-	20	-	-	16	-	40
	03061502U E01	Disaster Management	3	3	0	0	20	-	20	60	-	40	-	100
	03061602U E01	Digital Marketing	3	3	0	0	20	-	20	60	-	40	-	100
	03061702U E01	Introduction to Electrical Safety and Management	3	2	2	0	20	50	20	60	-	40	20	150
	03061802U E01	E Waste Management	3	3	0	0	20	-	20	60	-	40	-	100
	03061902U E01	Industrial Safety and Risk Management	3	3	0	0	20	-	20	60	-	40	-	100
	03061902U E02	Plant Layout and Fire Safety	3	3	0	0	20	-	20	60	-	40	-	100
		Total credits	22											

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical

Theory Passing % : 40 Practical Passing % : 40