

SARDAR PATEL UNIVERSITY
B.Sc. Semester: VI
(Under Choice Based Credit Scheme)
Syllabus with Effect from: 2023-24

Course Type	Course Code	Name Of Course	T /P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
Core Course (Any One Group)									
Chemistry	US06CCHE51	Organic Chemistry	T	4	4	3	30	70	100
	US06CCHE52	Inorganic Chemistry	T	4	4	3	30	70	100
	US06CCHE53	Physical Chemistry	T	4	4	3	30	70	100
	US06CCHE54	Applied Chemistry	T	4	4	3	30	70	100
	US06CCHE55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Electronics	US06CELE51	Discrete & Linear Circuits	T	4	4	3	30	70	100
	US06CELE52	Digital System	T	4	4	3	30	70	100
	US06CELE53	8-Bit Microprocessor Programming & Applications	T	4	4	3	30	70	100
	US06CELE54	Industrial Electronics	T	4	4	3	30	70	100
	US06CELE55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Physics	US06CPHY51	Quantum Mechanics	T	4	4	3	30	70	100
	US06CPHY52	Atomic and Molecular Spectroscopy	T	4	4	3	30	70	100
	US06CPHY53	Solid State Physics & Nuclear Physics	T	4	4	3	30	70	100
	US06CPHY54	Electrodynamics and Plasma Physics	T	4	4	3	30	70	100
	US06CPHY55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200

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Mathematics	US06CMTH51	Complex Analysis	T	4	4	3	30	70	100
	US06CMTH52	Linear Algebra	T	4	4	3	30	70	100
	US06CMTH53	Ring Theory	T	4	4	3	30	70	100
	US06CMTH54	Real Analysis-III	T	4	4	3	30	70	100
	US06CMTH55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Biochemistry	US06CBCH51	Genetic Engineering	T	4	4	3	30	70	100
	US06CBCH52	Immunology	T	4	4	3	30	70	100
	US06CBCH53	Human Metabolism-II	T	4	4	3	30	70	100
	US06CBCH54	Clinical Biochemistry	T	4	4	3	30	70	100
	US06CBCH55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Biotechnology	US06CBIT51	Environmental Biotechnology	T	4	4	3	30	70	100
	US06CBIT52	Fermentation Technology	T	4	4	3	30	70	100
	US06CBIT53	Developmental Biology	T	4	4	3	30	70	100
	US06CBIT54	Applications of Biotechnology	T	4	4	3	30	70	100
	US06CBIT25	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Botany	US06CBOT51	Pharmacognosy and Phytochemistry	T	4	4	3	30	70	100
	US06CBOT52	Anatomy of Angiosperms	T	4	4	3	30	70	100
	US06CBOT53	Plant Biochemistry	T	4	4	3	30	70	100
	US06CBOT54	Plant Biotechnology	T	4	4	3	30	70	100
	US06CBOT55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200

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Microbiology	US06CMIC51	Molecular Genetics	T	4	4	3	30	70	100
	US06CMIC52	Immunology and Medical Microbiology	T	4	4	3	30	70	100
	US06CMIC53	Environmental Microbiology and Pollution Control	T	4	4	3	30	70	100
	US06CMIC54	Fermentation Technology-II	T	4	4	3	30	70	100
	US06CMIC55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Zoology	US06CZOO51	Vertebrata	T	4	4	3	30	70	100
	US06CZOO52	Developmental Biology & Evolution	T	4	4	3	30	70	100
	US06CZOO53	Metabolism & Nutrition	T	4	4	3	30	70	100
	US06CZOO54	Comparative Anatomy of Chordata	T	4	4	3	30	70	100
	US06CZOO55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Industrial Chemistry (Voc.)	US06CICV51	Synthetic Dyes and Drugs	T	4	4	3	30	70	100
	US06CICV52	Polymer Science and Technology	T	4	4	3	30	70	100
	US06CICV53	Industrial Management & Economics	T	4	4	3	30	70	100
	US06CICV54	Separation Techniques, Plant Design & Control	T	4	4	3	30	70	100
	US06CICV55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Industrial Chemistry	US06CICH51	Synthesis Dyes and Pharmaceuticals	T	4	4	3	30	70	100
	US06CICH52	Polymer Technology	T	4	4	3	30	70	100
	US06CICH53	Business Organizations & Management	T	4	4	3	30	70	100
	US06CICH54	Process Control for Heat & Mass Transfer Operations	T	4	4	3	30	70	100
	US06CICH55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200

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Computer Science	US06CCSC51	Object Oriented Programming using Java	T	4	4	3	30	70	100
	US06CCSC52	PHP Using MySql	T	4	4	3	30	70	100
	US06CCSC53	Python Programming	T	4	4	3	30	70	100
	US06CCSC54	Software Engineering	T	4	4	3	30	70	100
	US06CCSC55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Electronics & Communication	US06CELC51	Power Electronics and Op Amp Application	T	4	4	3	30	70	100
	US06CELC52	Microprocessor Interrupts & Interfacing	T	4	4	3	30	70	100
	US06CELC53	Microwave Device & Optical Fiber Communication	T	4	4	3	30	70	100
	US06CELC54	Network Infrastructure Management	T	4	4	3	30	70	100
	US06CELC55	Practicals (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200
Statistics	US06CSTA51	Sampling Distributions	T	4	4	3	30	70	100
	US06CSTA52	Testing of Hypothesis	T	4	4	3	30	70	100
	US06CSTA53	Design of Experiments	T	4	4	3	30	70	100
	US06CSTA54	Operations Research	T	4	4	3	30	70	100
	US06CSTA55	Practical : Statistical Data Analysis Using R Programming (Prac. I, Prac. II Prac. III & IV)	P	8	16	12	60	140	200