

SARDAR PATEL UNIVERSITY
B.Sc. Semester: IV
(Under Choice Based Credit Scheme)
Syllabus with Effect from: 2022-23

Course Type	Course Code	Name Of Course	T / P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
Ability Enhancement compulsory Course	US04AENG51	Functional English	P	2	2	2	==	50	50
Core Course (Any Two Group)									
Chemistry	US04CCHE51	Organic Chemistry	T	4	4	3	30	70	100
	US04CCHE52	Analytical Chemistry	T	4	4	3	30	70	100
	US04CCHE53	Practicals (Prac. I & Prac. II)	P	4	8	6	==	100	100
Electronics	US04CELE51	Electronics Devices and Application	T	4	4	3	30	70	100
	US04CELE52	Digital Electronics	T	4	4	3	30	70	100
	US04CELE53	Practicals	P	4	8	4	==	100	100
Physics	US04CPHY51	Electromagnetic Theory and Spectroscopy	T	4	4	3	30	70	100
	US04CPHY52	Classical, Quantum and Solid State Physics	T	4	4	3	30	70	100
	US04CPHY53	Practicals	P	4	8	4	==	100	100
Applied Physics	US04CAPH21	Spectroscopy	T	4	4	3	30	70	100
	US04CAPH22	Electricity, Magnetism and Solid State Electronics	T	4	4	3	30	70	100
	US04CAPH23	Practicals	P	4	8	4	==	100	100
Mathematics	US04CMTH51	Partial Differential Equations	T	4	4	3	30	70	100
	US04CMTH52	Numerical Methods	T	4	4	3	30	70	100
	US04CMTH53	Practicals	P	4	8	4	==	100	100
Statistics	US04CSTA51	Statistical Techniques	T	4	4	3	30	70	100
	US04CSTA52	Probability Distributions	T	4	4	3	30	70	100
	US04CSTA53	Practicals	P	4	8	4	==	100	100

Course Type	Course Code	Name Of Course	T /P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
Biochemistry	US04CBCH51	Fundamental of Biomolecules & Minerals	T	4	4	3	30	70	100
	US04CBCH52	Cell Biology	T	4	4	3	30	70	100
	US04CBCH53	Practicals	P	4	8	4	==	100	100
Biology	US04CBIO21	Aquatic Biology	T	4	4	3	30	70	100
	US04CBIO22	Economic Botany	T	4	4	3	30	70	100
	US04CBIO23	Practicals	P	4	8	4	==	100	100
Biotechnology	US04CBIT51	Molecular Biology	T	4	4	3	30	70	100
	US04CBIT52	Plant and animal Biotechnology	T	4	4	3	30	70	100
	US04CBIT53	Practicals	P	4	8	4	==	100	100
Botany	US04CBOT51	Ethno, Economic And Nutraceutical Botany	T	4	4	3	30	70	100
	US04CBOT52	Plant Morphology and Taxonomy	T	4	4	3	30	70	100
	US04CBOT53	Practicals	P	4	8	4	==	100	100
Microbiology	US04CMIC51	Fundamentals of Microbiology-II	T	4	4	3	30	70	100
	US04CMIC52	Applied Microbiology	T	4	4	3	30	70	100
	US04CMIC53	Practicals	P	4	8	6	==	100	100
Zoology	US04CZOO51	Vertebrata and Animal Behaviour	T	4	4	3	30	70	100
	US04CZOO52	Physiology and Wild Life	T	4	4	3	30	70	100
	US04CZOO53	Practicals	P	4	8	4	==	100	100
Industrial Chemistry (Voc.)	US04CICV51	Fluid Mechanical and Heat Transfer	T	4	4	3	30	70	100
	US04CICV52	Basic Analytical Chemistry	T	4	4	3	30	70	100
	US04CICV53	Practicals	P	4	8	4	==	100	100
Industrial Chemistry	US04CICH51	Chemical Plant Utilities	T	4	4	3	30	70	100
	US04CICH52	Analytical Chemistry	T	4	4	3	30	70	100
	US04CICH53	Practicals	P	4	8	4	==	100	100

Course Type	Course Code	Name Of Course	T /P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
Computer Science	US04CCSC51	Advanced 'C' and Introduction to Data Structures	T	4	4	3	30	70	100
	US04CCSC52	Web Application Development – II	T	4	4	3	30	70	100
	US04CCSC53	Practicals	P	4	8	4	==	100	100
Electronics & Communication	US04CELC51	Electromagnetic	T	4	4	3	30	70	100
	US04CELC52	Radio and Television System	T	4	4	3	30	70	100
	US04CELC53	Practicals	P	4	8	4	==	100	100

Skill -Enhancement Elective Course (Any One Subject)						
Course Code	Name Of Course	T /P	Credit	Contact Hours Per Week	Exam Duration in hrs	Total Marks
US04SSTA51	Foundation of Statistics - II	T	2	2	2	50
US04SSTA52	Operations Research - II	T	2	2	2	50
US04SSTA53	Biostatistics - II	T	2	2	2	50
US04SMTH51	Number Theory - 2	T	2	2	2	50
US04SMTH53	Graph Theory - 2	T	2	2	2	50
US04SMTH53	Mechanics - 2	T	2	2	2	50
US04SICV51	Specialty Chemicals	T	2	2	2	50
US04SICV52	Green Chemistry	T	2	2	2	50
US04SICV53	Instrumental Methods of Analysis	T	2	2	2	50
US04SICH51	Introduction to Green Chemistry	T	2	2	2	50
US04SCHE51	Polymer Science-II	T	2	2	2	50
US04SCHE52	Medicinal Chemistry : Fundamentals	T	2	2	2	50
US04SCHE53	Green Chemistry : Fundamentals	T	2	2	2	50
US04SNCC51	NCC Army-4	T+P	2	2	2	50
US04SSPN51	Soil & Plant Nutrition	T	2	2	2	50
US04SICT51	Information & Communication Technology-II	T	2	2	2	50
US04SIPD51	Integrated Personality Development	T	2	2	2	50
US04SFDN51	Food , Nutrition and Dietetics	T	2	2	2	50