

SARDAR PATEL UNIVERSITY
B.Sc. Semester: III
(Under Choice Based Credit Scheme)
Syllabus with Effect from: 2019-20
(Updated on 26-8-2019)

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	US03AENG21	Functional English	P	2	2	2	==	50	50
Core Course (Any Two Group)									
Chemistry	US03CCHE21	Inorganic Chemistry	T	4	4	3	30	70	100
	US03CCHE22	Physical Chemistry	T	4	4	3	30	70	100
	US03CCHE23	Practicals	P	4	8	4	==	100	100
Electronics	US03CELE21	Electronics Devices	T	4	4	3	30	70	100
	US03CELE22	Instrumentation and Digital Electronics	T	4	4	3	30	70	100
	US03CELE23	Practicals	P	4	8	4	==	100	100
Physics	US03CPHY21	Optics	T	4	4	3	30	70	100
	US03CPHY22	Solid State Electronics	T	4	4	3	30	70	100
	US03CPHY23	Practicals	P	4	8	4	==	100	100
Applied Physics	US03CAPH21	Optics and Remote Sensing	T	4	4	3	30	70	100
	US03CAPH22	Digital Electronics & Optoelectronic Devices	T	4	4	3	30	70	100
	US03CAPH23	Practicals	P	4	8	4	==	100	100
Mathematics	US03CMTH21	Numerical Methods	T	4	4	3	30	70	100
	US03CMTH22	Multivariate Calculus	T	4	4	3	30	70	100
	US03CMTH23	Practicals	P	4	8	4	==	100	100
Instrumentation	US03CINS21	Electronic Instrumentation	T	4	4	3	30	70	100
	US03CINS22	Transducers, Probes and LASERs	T	4	4	3	30	70	100
	US03CINS23	Practicals	P	4	8	4	==	100	100
Statistics	US03CSTA21	Descriptive Statistics	T	4	4	3	30	70	100
	US03CSTA22	Elements of Probability Theory	T	4	4	3	30	70	100
	US03CSTA23	Practicals	P	4	8	4	==	100	100

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Instrumentation (Voc.)	US03CINV21	Electrical Instrument and Power Electronics-I	T	4	4	3	30	70	100
	US03CINV22	Operational Amplifiers and Filters	T	4	4	3	30	70	100
	US03CINV23	Practicals	P	4	8	4	==	100	100
Biochemistry	US03CBCH21	Biochemistry of Bio molecules I	T	4	4	3	30	70	100
	US03CBCH22	Biophysical Biochemistry	T	4	4	3	30	70	100
	US03CBCH23	Practicals	P	4	8	4	==	100	100
Bioinformatics	US03CBNF21	Basics in Bioinformatics	T	4	4	3	30	70	100
	US03CBNF22	Cell Biology	T	4	4	3	30	70	100
	US03CBNF23	Practicals	P	4	8	4	==	100	100
Biology	US03CBIO21	Concept of Biology	T	4	4	3	30	70	100
	US03CBIO22	Applied Zoology	T	4	4	3	30	70	100
	US03CBIO23	Practicals	P	4	8	4	==	100	100
Biotechnology	US03CBIT21	Fundamentals of Biotechnology	T	4	4	3	30	70	100
	US03CBIT22	Microbial Biotechnology	T	4	4	3	30	70	100
	US03CBIT23	Practicals	P	4	8	4	==	100	100
Botany	US03CBOT21	Phycology, Mycology And Phytopathology	T	4	4	3	30	70	100
	US03CBOT22	Plant Anatomy, Physiology, Taxonomy And Bioinformatics	T	4	4	3	30	70	100
	US03CBOT23	Practicals	P	4	8	4	==	100	100
Environmental Science	US03CENV21	Fundamentals of Environmental Science	T	4	4	3	30	70	100
	US03CENV22	Ecology & Water Resources	T	4	4	3	30	70	100
	US03CENV23	Practicals	P	4	8	4	==	100	100
Genetics	US03CGEN21	Principles of Genetics –I	T	4	4	3	30	70	100
	US03CGEN22	Animal Physiology	T	4	4	3	30	70	100
	US03CGEN23	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
Microbiology	US03CMIC21	Elements of Microbiology - I	T	4	4	3	30	70	100
	US03CMIC22	Microbial Physiology	T	4	4	3	30	70	100
	US03CMIC23	Practicals	P	4	8	4	==	100	100
Zoology	US03CZOO21	Invertebrate, Economic Zoology & Toxicology	T	4	4	3	30	70	100
	US03CZOO22	Human Physiology & Adaptation	T	4	4	3	30	70	100
	US03CZOO23	Practicals	P	4	8	4	==	100	100
Industrial Chemistry (Voc.)	US03CICV21	Chemical Plant Auxiliaries & Manufacturing	T	4	4	3	30	70	100
	US03CICV22	Fundamentals of Organic Chemistry	T	4	4	3	30	70	100
	US03CICV23	Practicals	P	4	8	4	==	100	100
Industrial Chemistry	US03CICH21	Chemical Process Principles & Engineering Materials	T	4	4	3	30	70	100
	US03CICH22	Organic Chemistry	T	4	4	3	30	70	100
	US03CICH23	Practicals	P	4	8	4	==	100	100
Computer Science	US03CCSC21	Fundamentals of Computer Programming Using C	T	4	4	3	30	70	100
	US03CCSC22	Web Application Development – I	T	4	4	3	30	70	100
	US03CCSC23	Practicals	P	4	8	4	==	100	100
Information Technology	US03CINT21	System Analysis and Design	T	4	4	3	30	70	100
	US03CINT22	Relational Database Management Systems-I	T	4	4	3	30	70	100
	US03CINT23	Practicals	P	4	8	4	==	100	100
Electronics & Communication	US03CELC21	Signal Processing	T	4	4	3	30	70	100
	US03CELC22	Analog Communication	T	4	4	3	30	70	100
	US03CELC23	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
US03SSTA21	Foundation of Statistics-I	T	2	2	2	50
US03SSTA22	Biostatistics - I	T	2	2	2	50
US03SSTA23	Operations Research-I	T	2	2	2	50
US03SBIT21	Process Development in Industrial Microbiology-I	T	2	2	2	50
US03SMIC21	Fundamentals in Bioinformatics I	T	2	2	2	50
US03SMED21	Medical Diagnostics	T	2	2	2	50
US03SMTH21	Number Theory - 1	T	2	2	2	50
US03SICV21	Selected Chemical Process Industries	T	2	2	2	50
US03SICV22	Industrial Pollution, Its Control and Safety	T	2	2	2	50
US03SICH21	Chemical Process Industries	T	2	2	2	50
US03SICH22	Industrial Pollution and Safety	T	2	2	2	50
US03SICT21	Information and Communication Technology - I	T	2	2	2	50
US03SINT21	Computer Architecture	T	2	2	2	50
US03SGEN21	Biomolecules and Bioinstrumentation-I	T	2	2	2	50
US03SBMT21	Bio Mathematics	T	2	2	2	50
US03SIPS21	Industrial Pollution & Safety	T	2	2	2	50
US03SPUH21	Public Health	T	2	2	2	50
US03SBCH21	Fundamentals of Biochemistry & Bioinstrumentation-I	T	2	2	2	50
US03SCHE21	Polymer Science-I	T	2	2	2	50
US03SCHE22	Quantitative Methods of Analysis	T	2	2	2	50
US03SCHE23	Pharmaceutical Chemistry : Fundamentals	T	2	2	2	50