

SARDAR PATEL UNIVERSITY
NEP Structure B.Sc. Semester: I
(Under Choice Based Credit Scheme)
Syllabus with Effect from: 2023

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 Course									
	US1AEENG01	Functional English	P	2	2	3	==	50	50
Major Course (Any One Subject)									
Chemistry	US1MACHE01	General Chemistry-I	T	4	4	3	30	70	100
	US1MACHE02	Chemistry Practical-I	P	4	8	6	=	100	100
Physics	US1MAPHY01	Mechanics and Optics	T	4	4	3	30	70	100
	US1MAPHY02	Physics Practical	P	4	8	6	=	100	100
Zoology	US1MAZOO01	Animal Diversity and Physiology	T	4	4	3	30	70	100
	US1MAZOO02	Zoology Practical	P	4	8	6	=	100	100
Bio Chemistry	US1MABIC01	Introduction to Biochemistry	T	4	4	3	30	70	100
	US1MABIC02	Biochemistry Practical	P	4	8	6	=	100	100
Botany	US1MABOT01	Biomolecules and Cellbiology	T	4	4	3	30	70	100
	US1MABOT02	Botany Practical	P	4	8	6	=	100	100
Biotechnology	US1MABIT01	Basic of Biotechnology-1	T	4	4	3	30	70	100
	US1MABIT02	Biotechnology Practical	P	4	8	6	=	100	100
Microbiology	US1MAMIC01	Introduction to Microbiology	T	4	4	3	30	70	100
	US1MAMIC01	Microbiology Practical	P	4	8	6	=	100	100
Industrial Chemistry	US1MAICH01	Industrial Aspects of Chemistry	T	4	4	3	30	70	100
	US1MAICH02	Industrial Chemistry Practical	P	4	8	6	=	100	100



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Industrial Chemistry Vocational	US1MAICV01	Applied Chemistry	T	4	4	3	30	70	100
	US1MAICV02	Practical	P	4	8	6	=	100	100
Mathematics	US1MAMTH01	Calculus	T	4	4	3	30	70	100
	US1MAMTH02	Problems and Exercises in Calculus (Practical)	P	4	8	6	=	100	100
Electronics and Communication	US1MAELC01	Electronic Measurement and Instrumentation	T	4	4	3	30	70	100
	US1MAELC02	Electronics and Communication Practical	P	4	8	=	=	100	100
Computer Science	US1MACSC01	Computer Fundamentals - I	T	4	4	3	30	70	100
	US1MACSC02	Practical Based on US1MACSC01	P	4	8	4	=	100	100
Electronics	US1MAELE01	Electronic Components.	T	4	4	3	30	70	100
	US1MAELE02	Electronics Practicals.	P	4	8	=	=	100	100

Minor Course (Any One Subject)									
Chemistry	US1MICHE01	Basic Chemistry-I	T	2	2	3	15	35	50
	US1MICHE02	Chemistry Practical-I	P	2	4	3	=	50	50
Physics	US1MIPHY01	Optics and LASER applications	T	2	2	3	15	35	50
	US1MIPHY02	Physics Practical	P	2	4	3	=	50	50
Zoology	US1MIZOO01	Animal Diversity and Physiology -1	T	2	2	3	15	35	50
	US1MIZOO02	Zoology Practical	P	2	4	3	=	50	50
Biochemistry	US1MIBIC01	Fudamentals of Biochemistry-I	T	2	2	3	15	35	50
	US1MIBIC02	Biochemistry Practical	P	2	4	3	=	50	50
Botany	US1MIBOT01	Phycology and Mycology	T	2	2	3	15	35	50
	US1MIBOT02	Botany Practical	P	2	4	3	=	50	50



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Biotechnology	US1MIBIT01	Basic of Biotechnology-2	T	2	2	3	15	35	50
	US1MIBIT02	Biotechnology Practical	P	2	4	3	=	50	50
Microbiology	US1MIMIC01	Introduction to Microbiology	T	2	2	3	15	35	50
	US1MIMIC01	Microbiology Practical	P	2	4	3	=	50	50
Industrial Chemistry	US1MIICH01	Introduction to Industrial Chemistry - 1	T	2	2	3	15	35	50
	US1MIICH02	Industrial Chemistry Practical	P	2	4	3	=	50	50
Industrial Chemistry Vocational	US1MIICV01	Introduction to Industrial Chemistry	T	2	2	3	15	35	50
	US1MIICV02	Practical	P	2	4	3	=	50	50
Mathematics	US1MIMTH01	Analytic Geometry	T	2	2	3	15	35	50
	US1MIMTH02	Problems and Exercises in Analytic Geometry (Practical)	P	2	4	3	=	50	50
Electronics and Communication	US1MIELC01	Instrumentation	T	2	2	3	15	35	50
	US1MIELC02	Electronics and Communication Practical	P	2	4	3	=	50	50
Statistics	US1MISTA01	Descriptive Statistics for Univariate data	T	2	2	3	15	35	50
	US1MISTA01	Statistics Practical	P	2	4	3	=	50	50
Computer Science	US1MICSC01	Computer Organization and Problem Solving	T	2	2	3	15	35	50
	US1MICSC02	Practical Based on US1MICSC01	P	2	4	2	=	50	50
Electronics	US1MIELE01	Basic Electronics.	T	2	2	3	15	35	50
	US1MIELE02	Electronics Practicals.	P	2	4	3	=	50	50



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							Internal	External	Total
Multi / Inter Disciplinary (Any One Subject)									
Chemistry	US1IDCHE01	Fundamentals of Chemistry-I	T	2	2	3	15	35	50
	US1MDCHE01	Environmental Pollution-I	T	2	2	3	15	35	50
	US1IDCHE02	Chemistry Practical-I	P	2	4	3	=	50	50
	US1MDCHE02	Chemistry Practical-I	P	2	4	3	=	50	50
Physics	US1IDPHY01	LASER and Optical Instruments	T	2	2	3	15	35	50
	US1IDPHY02	Physics Practical	P	2	4	3	=	50	50
Zoology	US1IDZOO01	Invertebrates	T	2	2	3	15	35	50
	US1IDZOO02	Invertebrates Practical	P	2	4	3	=	50	50
Biochemistry	US1IDBIC01	Basic concepts of Biochemistry	T	2	2	3	15	35	50
	US1IDBIC02	Biochemistry Practical	P	2	4	3	=	50	50
Botany	US1IDBOT01	Plants and Human welfare	T	2	2	3	15	35	50
	US1IDBOT02	Botany Practical	P	2	4	3	=	50	50
Biotechnology	US1IDBIT01	Introduction to Biotechnology	T	2	2	3	15	35	50
	US1IDBIT02	Biotechnology Practical	P	2	4	3	=	50	50
Microbiology	US1IDMIC01	Introduction to Microbiology	T	2	2	3	15	35	50
	US1IDMIC02	Microbiology Practical	P	2	4	3	=	50	50
Industrial Chemistry	US1IDICH01	Introduction to Instrumentation and Process Control-I	T	2	2	3	15	35	50
Mathematics	US1IDMTH01	Higher Order and Partial Derivatives	T	2	2	3	15	35	50
	US1IDMTH02	Problems and Exercises in Higher Order and Partial Derivatives (Practical)	P	2	4	3	=	50	50
Computer Science	US1IDCSC01	Basics of Computers-I	T	2	2	3	15	35	50
	US1IDCSC02	Practical Based on US1IDCSC01	P	2	4	2	=	50	50
Electronics	US1IDELE01	Fundamentals of Electronics.	T	2	2	3	15	35	50
	US1IDELE02	Electronics Practicals.	P	2	4	3	=	50	50



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Skill Enhancement Course (Any One Subject)									
Chemistry	US1SECHE01	Environmental Chemistry-I	T	2	2	2	==	50	50
Physics	US1SEPHY01	Electrical and Electronic components and measurement-I	T	2	2	2	==	50	50
Biochemistry	US1SEBIC01	Tools and Techniques in Biochemistry-1	T	2	2	2	==	50	50
Botany	US1SEBOT01	Landscape and gardening	T	2	2	2	==	50	50
Microbiology	US1SEMIC01	Fermented food	T	2	2	2	==	50	50
Zoology	US1SEZOO01	Wildlife and Techniques	T	2	2	2	==	50	50
Industrial Chemistry	US1SEICH01	Industrial Safety & Hygiene - 1	T	2	2	2	==	50	50
Statistics	US1SESTA01	Elements of Biostatistics	T	2	2	2	==	50	50
Computer Science	US1SECSC01	Information Technology Fundamentals – I (ITF-I)	T	2	2	2	==	50	50



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Value Added Course / <u>Indian Knowledge System</u> (Any One)	US1KBSC01	Contribution of Ancient Indian Knowledge in Modern Medicine	T	2	2	2	-	50	50
	US1KBSC02	Arthaveda	T	2	2	2	-	50	50
	US1KBSC03	Astrology	T	2	2	2	-	50	50
	US1KBSC04	Dhanurveda	T	2	2	2	-	50	50
	US1KBSC05	Gandharvaveda	T	2	2	2	-	50	50
	US1KBSC06	Kalp Shashtra	T	2	2	2	-	50	50
	US1KBSC07	Ayurveda	T	2	2	2	-	50	50
	US1KBSC08	Chhand Rhythm	T	2	2	2	-	50	50
	US1KBSC09	Introduction to Indian Knowledge Systems	T	2	2	2	-	50	50

