

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 | | | | | | | | | |
| | US01AEENG01 | Functional English | P | 2 | 2 | 2 | 25 | 25 | 50 |
| Major Course (Any One Subject) | | | | | | | | | |
| Chemistry | US01MACHE01 | General Chemistry-I | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MACHE02 | Chemistry Practical-I | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Physics | US01MAPHY01 | Mechanics and Optics | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MAPHY02 | Physics Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Zoology | US01MAZOO01 | Animal Diversity and Physiology-1 | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MAZOO02 | Zoology Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Bio Chemistry | US01MABIC01 | Introduction to Biochemistry | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MABIC02 | Biochemistry Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Botany | US01MABOT01 | Biomolecules and Cellbiology | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MABOT02 | Botany Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Biotechnology | US01MABTE01 | Basic of Biotechnology-1 | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MABTE02 | Biotechnology Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Microbiology | US01MAMIC01 | Introduction to Microbiology | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MAMIC01 | Microbiology Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |
| Industrial Chemistry | US01MAICH01 | Industrial Aspects of Chemistry | T | 4 | 4 | 2:30 | 50 | 50 | 100 |
| | US01MAICH02 | Industrial Chemistry Practical | P | 4 | 8 | 3 | 50 | 50 | 100 |



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|--|-------------|---|-------|--------|------------------------|----------------------|--------------------|----------|-------|
| | | | | | | | Internal | External | Total |
| Biotechnology | US01MIBTE01 | Basic of Biotechnology-2 | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIBTE02 | Biotechnology Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Microbiology | US01MIMIC01 | Introduction to Microbiology | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIMIC02 | Microbiology Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Industrial Chemistry | US01MIICH01 | Introduction to Industrial Chemistry - 1 | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIICH02 | Industrial Chemistry Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Industrial Chemistry Vocational | US01MIICV01 | Introduction to Industrial Chemistry | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIICV02 | Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Mathematics | US01MIMTH01 | Analytic Geometry | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIMTH02 | Problems and Exercises in Analytic Geometry (Practical) | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Electronics and Communication | US01MIELC01 | Instrumentation | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIELC02 | Electronics and Communication Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Statistics | US01MISTA01 | Descriptive Statistics for Univariate data | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MISTA01 | Statistics Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Computer Science | US01MICSC01 | Computer Organization and Problem Solving | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MICSC02 | Practical Based on US1MICSC01 | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Electronics | US01MIELE01 | Basic Electronics. | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MIELE02 | Electronics Practicals. | P | 2 | 4 | 2 | 25 | 25 | 50 |



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|---|-------------|--|-------|--------|------------------------|----------------------|--------------------|----------|-------|
| | | | | | | | Internal | External | Total |
| Multi / Inter Disciplinary (Any One Subject) | | | | | | | | | |
| Chemistry | US01IDCHE01 | Fundamentals of Chemistry-I | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01MDCHE01 | Environmental Pollution-I | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDCHE02 | Chemistry Practical-I | P | 2 | 4 | 2 | 25 | 25 | 50 |
| | US01MDCHE02 | Chemistry Practical-I | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Physics | US01IDPHY01 | LASER and Optical Instruments | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDPHY02 | Physics Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Zoology | US01IDZOO01 | Invertebrates | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDZOO02 | Invertebrates Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Biochemistry | US01IDBIC01 | Basic concepts of Biochemistry | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDBIC02 | Biochemistry Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Botany | US01IDBOT01 | Plants and Human welfare | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDBOT02 | Botany Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Biotechnology | US01IDBTE01 | Introduction to Biotechnology | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDBTE02 | Biotechnology Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Microbiology | US01IDMIC01 | Introduction to Microbiology | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDMIC02 | Microbiology Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Industrial Chemistry | US01IDICH01 | Introduction to Instrumentation and Process Control-1 | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDICH02 | Industrial Chemistry Practical | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Mathematics | US01IDMTH01 | Higher Order and Partial Derivatives | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDMTH02 | Problems and Exercises in Higher Order and Partial Derivatives (Practical) | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Computer Science | US01IDCSC01 | Basics of Computers-I | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDCSC02 | Practical Based on US1IDCSC01 | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Electronics | US01IDELE01 | Fundamentals of Electronics. | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IDELE02 | Electronics Practicals. | P | 2 | 4 | 2 | 25 | 25 | 50 |



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| | | | | | | | Internal | External | Total |
| Skill Enhancement Course (Any One Subject) | | | | | | | | | |
| Chemistry | US01SECHE01 | Environmental Chemistry-I | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Physics | US01SEPHY01 | Electrical and Electronic components and measurement-I | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01SEPHY02 | Experimental skills in Physics (Effect from June, 2024) | P | 2 | 4 | 2 | 25 | 25 | 50 |
| Biochemistry | US01SEBIC01 | Tools and Techniques in Biochemistry-1 | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Botany | US01SEBOT01 | Landscape and gardening | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Microbiology | US01SEMIC01 | Fermented food | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Zoology | US01SEZOO01 | Wildlife and Techniques | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Industrial Chemistry | US01SEICH01 | Industrial Safety & Hygiene - 1 | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Statistics | US01SESTA01 | Elements of Biostatistics | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| Computer Science | US01SECSC01 | Information Technology Fundamentals – I (ITF-I) | T | 2 | 2 | 1:30 | 25 | 25 | 50 |



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| | | | | | | | Internal | External | Total |
| Value Added Course / <u>Indian Knowledge System</u> (Any One) | US01IKBSC01 | Introduction to Indian Knowledge Systems | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC02 | Arthaveda | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC03 | Astrology | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC04 | Dhanurveda | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC05 | Gandharvaveda | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC06 | Kalp Shashtra | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC07 | Ayurveda | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC08 | Chhand Rhythm | T | 2 | 2 | 1:30 | 25 | 25 | 50 |
| | US01IKBSC09 | Contribution of Ancient Indian Knowledge in Modern Science | T | 2 | 2 | 1:30 | 25 | 25 | 50 |

(નોંધ: પરીક્ષા વિભાગના પરિપત્ર નં. ઇ-૩/૧૪૯૫ તારીખ: ૧૨/૧૦/૨૦૨૩ યુનિવર્સિટીની વેબસાઇટ www.spuvvn.edu/students_corner/Examination Information/Examination Notification 2023-24 પર ઉપલબ્ધ છે, જેની નોંધ લઈ આગળની કાર્યવાહી કરવાની રહેશે.)

