

SARVAJANIK UNIVERSITY
FACULTY OF SCIENCE



SARVAJANIK
UNIVERSITY

INCLUSIVE | INTEGRATED | INNOVATIVE

Faculty of Science

B. Sc. (Honors)

B.Sc. (Hons.) Biotechnology

B.Sc. (Hons.) Chemistry

B.Sc. (Hons.) Environmental Science

B.Sc. (Hons.) Microbiology

EXIT COURSE 1

(After Sem-2)

(W.E.F. 2025-26)

Name of Faculty: Science	Department: BT, CHE, ES, MB
Program: B.Sc. (Hons)	Type: Vocational Course for Exit
Subject: Vocational Course for Exit after Semester 2	Semester: After 2
Credits: 04	
Course Description: This vocational course is designed for students seeking an Undergraduate Certificate by opting for an exit option after 2 nd Semester of UGFYP as per NEP2020.	

Unit 1: Introduction to Science Laboratory (15 hrs)

- 1.1 Personal Behavior and General Instructions to Trainee
- 1.2 Safety and Hygiene in Laboratory
- 1.3 Lab Layout and Equipment Placement
- 1.4 Analysis Facilities in the Laboratory
- 1.5 Lab Cleaning and Sanitization

Unit 2: Sampling Techniques (15 hrs)

- 2.1 PPE and the Hazards at Work Place
- 2.2 Soil Sample Collection
- 2.3 Water Sampling
- 2.4 Plant Sampling Techniques
- 2.5 Labelling, Packing and Dispatch of Samples

Unit 3: Sample Processing (15 hrs)

- 3.1 Registration of Samples
- 3.2 Soil Sample Preparation for Analysis
- 3.3 Sample Preparation of Manure
- 3.4 Preparation of Plants Samples
- 3.5 Handling, Labelling and Storage of Water Samples

Unit 4: Preliminary Work in Laboratory (15 hrs)

- 4.1 Lab-Wares and Equipment
- 4.2 Necessity and Process of Calibration
- 4.3 Preparation of Stock and Working Standard Solutions
- 4.4 Soil Testing Kit: On-Field Nutrient Analysis
- 4.5 Introduction to Soil Health Card

References:

1. Participants' Handbook for 'Soil and Water Testing Lab Technician' by Agriculture Skill Council of India.



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EXIT COURSE 2

(After Sem-4)

(W.E.F. 2025-26)

Name of Faculty: Science	Department: BT, CHE, ES, MB
Program: B.Sc. (Hons)	Type: Vocational Course for Exit
Subject: Vocational Course for Exit after Semester 4	Semester: After 4
Credits: 04	
Course Description: This vocational course is designed for students seeking an Undergraduate Diploma after opting for an exit option after 4 th Semester of UGFYP as per NEP2020.	

Unit 1: Industry Overview (15 hrs)

- 1.1 Overview of Life Science Industry
- 1.2 Impact on Society
- 1.3 Regulatory Authorities
- 1.4 Basic EHS Skills
- 1.5 Non-compliance

Unit 2: Principles of EHS (15 hrs)

- 2.1 Pollution Prevention and Recycling Programs
- 2.2 Emergency Response Planning
- 2.3 Procedures for Safe Waste Collection and Handling
- 2.4 Importance of Energy conservation
- 2.5 Segregate recyclable, non-recyclable, and hazardous waste

Unit 3: Procedures in Industry (15 hrs)

- 3.1 PPE Used in a Microbiology Lab
- 3.2 EHS Policies and Procedures
- 3.3 Escalation Matrix
- 3.4 Properties and Storage Conditions of Chemicals
- 3.5 Events to Promote a Culture of Safety

Unit 4: Documentation in Industry (15 hrs)

- 4.1 Reporting Structure in Organizations and Stakeholders
- 4.2 Types of Documentation in an Organization and Their Importance
- 4.3 Good Documentation Practices (GDP)
- 4.4 ALCOA +
- 4.5 Lab Information Management System (LIMS)

References:

1. Participants' Handbook for 'Manager-EHS (Manufacturing or Research facility for Pharma/ Biological Products/Medical Device)' by Life Sciences Sector Skills Council.

