SAVITRIBAI PHULE PUNE UNIVERSITY

Progressive Education Society's

Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016

B.Sc. Blended Program

(A degree of Savitribai Phule Pune University equivalent to the degree of University of Melbourne)

End Semester Examination: October 2024

Program: B.Sc. Blended Semester:V SET: A

Program (Specific): B.Sc.Blended(Chemistry)

Class: T.Y.B.Sc.Blended

Max.Marks: 25

Course Code: CHM506

Time: 1½ hrs

Name of the Course: Introduction to Forensic Science and Technology (Elective 2)

Paper: VI

Note:

- 1) All questions are compulsory.
- 2) Figures to the right corner indicate full marks.
- 3) Use of scientific calculators is allowed.
- 4) Draw diagrams wherever necessary.
- 5) Use only Black or blue ink/ball/gel pens for writing.

Q1] Select the correct option (Any 5).

 $[5 \times 1 = 5 \text{ M}]$

- i) In Forensic Science, science and —---- go hand in hand.
 - a. experiments b. arts c. law d. commerce
- ii) The detection of blood is done by —----- test.
 - a. presumptive b. bacterial c. acidfast d. feelings
- iii) The hair at the crime scene comes under —--- evidence.
 - a. thread b. chemical c. biological d. trace
- iv) The handwritten document comes under —---.
 - a. old evidence b. questioned document c. plain document d. digital evidence
- v) Fingerprint analysis is usually done by —----.
 - a. x rays b. spectroscopy c. drawing d. comparison
- vi) With the key pieces of evidence, the investigator can attempt to —---- the elements of the crime.
 - a. evidence b. result c. reconstruct d. resolve

Q2] Answer the following (Any 5).

 $[5 \times 2 = 10 \text{ M}]$

- i) How are fingerprints analysed?
- ii) Discuss the types of evidence.
- iii) Discuss the Frye case in Forensic Science.
- iv) What is a questioned document in Forensic Science?
- v) What is the main test needed for the drunk and drive case?
- vi) Explain the detection of petroleum products.

Q3] Answer the following (Any 2).

 $[2 \times 5 = 10 M]$

- i) Discuss the types and detection of explosives.
- ii) Write a note on the organisational set up of the Forensic Science Laboratories in India.
- iii) What biological samples can be collected at the crime scene? Discuss the analysis of any one biological sample in detail.