



Roll No.....

End Semester Examination, December 2024
B.Sc. (H) FS – 3rd Semester
FORENSIC BIOLOGY AND SEROLOGY (BSFS203A)

Time: 2.5 hrs

Max Marks: 50

Note: All Questions are compulsory. Marks are indicated against each question.

PART-A

Q.1 Answer any 5 out of 7 questions, each assessing understanding across the syllabus. Each question carries 2 marks.

- (a) Define body fluids and list its classification. [CO-1] [L-2]
- (b) What is the forensic significance of Hair found at a crime scene? [CO-1] [L-2]
- (c) Explain the ABO blood group system and its relevance in forensic analysis. [CO-1] [L-2]
- (d) Describe the composition of semen. [CO-1] [L-2]
- (e) List two methods used in species origin determination. [CO-1] [L-2]
- (f) What are STRs, and why is it essential in forensic DNA analysis? [CO-1] [L-2]
- (g) Name and briefly describe two methods for identifying bloodstains. [CO-1] [L-2]

Marks: 2x5 = 10

PART-B

Q.2 (a) Describe the steps involved in the VNTR profiling. [CO-2] [L-3]

OR

(b) Explain how study of human genome contributes to identifying individuals. [CO-2] [L-3]

Marks: 10

Q.3 (a) Discuss the procedures and precautions necessary for collecting and preserving blood evidence from a crime scene. [CO-3] [L-4]

OR

(b) Explain the various tests for identification of blood stains. [CO-3] [L-4]

Marks: 10

Q.4 (a) Explain the contribution of Kary Mullis in Forensic DNA testing. [CO-4] [L-5]

OR

(b) Explain the forensic application of SNPs and how do they differ from STRs. [CO-4] [L-5]

Marks: 10

Q.5 (a) Explain the process and forensic importance of species origin determination through immunological methods. [CO-5] [L-5]

OR

(b) Discuss the various tests for identification of the semen. [CO-5] [L-6]

Marks: 10