

Q.P. Code :19220

[Time: 2½ Hours]

[Marks:75]

Please check whether you have got the right question paper.

- N.B: 1. All questions are compulsory.
2. Draw neat labeled diagrams where necessary.

- Q. 1** Attempt **any two** of the following: **20**
- A) Describe Immuno-chromatographic assays for Human Glycophorin A protein
 - B) Explain the biochemistry of ABO blood groups.
 - C) Discuss any one case study signifying the importance of Forensic serology.
 - D) Write a note on Lewis antigen.
- Q. 2** Attempt **any two** of the following: **20**
- A) Write a note on the collection, packaging and analysis of biological evidence at a poaching scene.
 - B) DNA profiling techniques for individual identification can provide key evidence to wildlife crime investigations – Justify
 - C) A semi-decomposed body was recovered from a stream. How will you use playnomorph to aid in determining the causes of death?
 - D) Discuss the Wildlife Protection Act, 1972.
- Q. 3** Attempt **any two** of the following: **20**
- A) Discuss thoroughly the role of Y- chromosome profiling in forensic identification.
 - B) Give a detailed account of autosomal STR profiling.
 - c) Describe in detail the process of mtDNA analysis in individual profiling.
 - d) Write a note on the various admissibility standards for DNA evidence in the court of law.
- Q. 4** Attempt **any three** of the following: **15**
- a) Write a short note on the use of VNTRs in forensic DNA profiling
 - b) Write about any two endangered mammalian species of India
 - c) Write a note on secretor and non-secretor status
 - d) Write a note on Rh antigen system
 - e) Enlist the key agencies responsible for wildlife law enforcement in the country
