

**DIRECTORATE OF DISTANCE EDUCATION
NALSAR UNIVERSITY OF LAW, HYDERABAD**

M.A. (CRIMINAL LAW & FORENSIC SCIENCE)

Academic Year: 2025-2026

**Third Semester Repeat Examination – Online Proctored Examination
(December, 2025)**

2.3.9. DNA Fingerprinting

Duration of the Examination: 2 ½ hours

Total Marks : 70 marks

INSTRUCTIONS TO CANDIDATES

- a) Read the instructions carefully and adhere to the same.
- b) Please mention your Name, DDE ID No., date of the exam, name of the programme, name of the subject, total number of pages on the first page and write the page numbers in sequence on each sheet before upload.
- c) The questions to be interpreted as given and no clarification can be sought.
- d) Clearly indicate the question numbers while answering them. Answers without question numbers / wrong question numbers will not be evaluated.
- e) Write the answers clearly and neatly. Answers in illegible handwriting will not be taken into consideration.
- f) Candidates need to check the scanned and pdf converted file before uploading, whether all pages are scanned properly and the same is in sequence and clearly visible.
- g) Candidates are prohibited to use phones or any other electronic devices, books, material etc. during the Examination.
- h) Copying from any source including from other students is strictly prohibited. Plagiarism is considered as a serious academic mis-conduct and the University will take action as it deems fit.

1(a). Explain the significance of DNA as a unique biological identifier in forensic science. **(10 Marks)**

1(b). A decomposed body is recovered with limited tissue. As a forensic expert, explain the process you would follow to preserve, transport, extract, quantify, and ensure the best quality of DNA from the sample. **(15 Marks)**

2(a). What are Short Tandem Repeats (STRs)? Explain their importance in human identification and forensic profiling. **(10 Marks)**

2(b). A man claims to be the uncle of a missing child. Which STR approach (autosomal, Y-STR, or X-STR) would best establish the relationship, and why? **(10 Marks)**

3(a). Define wildlife forensics and discuss its importance in the enforcement of wildlife protection laws. **(10 Marks)**

3 (b). A wildlife officer seizes meat suspected to be from an endangered deer species. Outline the steps you would take to perform species identification using mitochondrial DNA analysis and BLAST database comparison. **(15 Marks)**