

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

M.A. (Criminal Law & Forensic Science)

Academic Year: 2022-2023

Third Semester - End Semester Examination (January, 2023)

Paper III – 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 DDE ID No., date of the exam, name of the programme & subject on the Answer Sheet and the Additional Answer Sheets, if any.
 - c) The questions to be interpreted as given and no clarification can be sought from the Invigilator.
 - 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 are prohibited to carry phones or any other electronic devices, books, material etc. in the Examination Hall.
 - g) Copying is strictly prohibited and is considered as a serious academic mis-conduct and the University will take action as it deems fit.
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Long Essay Questions

1. (a) List the various biological sources of DNA that can be recovered from a:
(10 marks)
 - i. Murder scene
 - ii. Sexual assault/rape victim
 - iii. Driver swapping in vehicular accidents cases
 - iv. Paternity and maternity disputes
 - (b) What do you understand by the term “Chain of Custody”? Explain briefly.
(5 marks)
 - (c) List the forensic investigations for which DNA profiling can be used. (10 marks)
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2. (a) What is “STR Analysis”? Explain with an example how STR analysis can be used to prove paternity.
(10 marks)
 - (b) What is “Wildlife Forensics”? Explain briefly. What types of cases/crimes can be solved using Wildlife forensics?
(10 marks)

3. (a) What do you understand by “DNA Phenotyping”? Explain the uses of DNA Phenotyping in Forensic Investigations? **(15 marks)**

(b) Write in detail what are the best methods for identifying paternal and maternal lineage? **(10 marks)**
