

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

M.A. (CRIMINAL LAW & FORENSIC SCIENCE)

Academic Year: 2025-2026

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

1.2.5. Forensic Chemical & General Science

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.

SECTION – A – Essay (Question No 1 to 4)

(Answer all questions. Answer for each question is to be written in 4 pages 600 words)
4×10 marks =40 marks

- 1. A farmer dies after consuming a suspicious liquid pesticide. Describe how a forensic toxicologist would identify the poison and determine the manner of death. **(10 Marks)**
- 2. A man is found unconscious at a bar and later dies in hospital. The autopsy reveals the smell of alcohol, and the viscera are preserved for chemical analysis. Explain the methods used to determine ethyl alcohol concentration in blood and urine. **(10 Marks)**

3. A truck carrying industrial chemicals overturns on a highway, releasing unknown substances. Explain the role of forensic chemistry in identifying hazardous materials. **(10 Marks)**
4. A sample of powder suspected to be narcotic is seized by customs officials. Explain the chemical and instrumental techniques used for preliminary and confirmatory identification of narcotic drugs. **(10 Marks)**

SECTION – B – Short notes (Question No 5 to 10)

(Answer all questions. Write a brief note on the following forensic topics in 2 pages 300 words) 6×5 marks=30 marks

5. In a suicide case, the viscera samples are decomposed. What alternative specimens can be tested for poison detection? **(5 Marks)**
6. A person collapses after inhaling gas in a closed room. Suggest which gases may be responsible and how they are detected. **(5 Marks)**
7. During examination of a suspect's clothing, you find traces of black soot and unburnt fuel. What does this indicate about arson evidence? **(5 Marks)**
8. A toxicological sample is analyzed using Gas Chromatography. What are the advantages of using GC in forensic chemical investigations? **(5 Marks)**
9. A sealed packet of white powder is received at the lab. Outline the initial safety and documentation procedures before chemical testing. **(5 Marks)**
10. A patient exhibits symptoms of dizziness and vomiting after taking cough syrup. How can forensic testing confirm drug adulteration? **(5 Marks)**