[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 1271 **E** **Your Roll No.....**

Unique Paper Code : 217585

Name of the Course : **B.Sc. (P) Applied Physical Science; Analytical Chemistry; Industrial Chemistry**

Name of the Paper : Forensic Science [EL 310(IV)]

Semester : V

Duration : 3 Hours Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **FIVE** questions.

1. (a) Justify the statement: *Forensic process is a series of activities involved in crime scene management.*

   (b) Explain the significance of infrared spectroscopy in identification of drugs of abuse. (7,8)

2. (a) In which crime cases are tool marks evidence encountered ? How is the tool marks evidence preserved ?

   (b) What is the significance of close-up and long shots while documenting the crime scene photographically ? (7,8)

3. (a) Explain the medico-legal importance of blood. How is wet blood sample preserved for forensic analysis ?

   (b) *Fingerprints are the most infallible means of identification.* Explain this statement with reference to fingerprint patterns and fingerprint characters. (7,8)

P.T.O.

4. (a) What is the difference between hard and soft X-rays ? Enumerate the forensic importance of X-rays.

   (b) List the differences between human bones and non-human bones. Which bones assist in determining the age and height of an individual ? (7,8)

5. (a) Describe the significance of hair evidence. How is hair evidence preserved ?

   (b) Define forensic toxicology. Give the classification of poisons, citing one example of each type. (7,8)

6. (a) What is the difference between trace evidence and physical evidence ? Describe one procedure for locating trace evidence.

   (b) What are questioned documents ? Describe the significance of physical, mechanical and mental characteristics while comparing two handwriting samples. (7,8)

7. Write short notes on any **three** of the following :

   (a) DNA profiling

   (b) Cyber crime

   (c) Narco analysis

   (d) Bite marks (5,5,5)

(100)