

**GUJARAT NATIONAL LAW UNIVERSITY
GANDHINAGAR**

Course: Fundamentals of Forensic Science
Semester- II (Batch: 2022-27)

End Semester Examination: May 2023

Date: 10th May, 2023

Duration: 2 hours

Max. Marks: 40

Instructions:

- Read the questions properly and write the answers in the given answer book.
- Do not write anything on the question paper.
- The respective marks for each question are indicated in-line.
- Indicate correct question numbers in front of the answer.
- Draw diagrams only with pencil.
- No questions or clarification can be sought during the exam period, answer as it is, giving reason, if any.

Part: A		Marks
(Answer the following questions based on the facts related to the crime scene)		
Q.1	The mother-in-law of the deceased told the investigating team that her daughter-in-law died during a struggle with the intruders who entered the house with the intention of robbery. The mother-in-law also shared that she and her husband were bolted in the adjacent room during the incident. Write the steps for crime scene management and searching by analysing the given situation.	(8)
Q.2	At the crime scene, following things were observed by IO: Condition of Victim's Body: The victim's dead body was lying on the floor of her room. Her head was smashed by a blunt weapon. A few scratch marks were present on the neck of the deceased. Explain the classification of mechanical injuries. Examine the given case and explain the possible mechanical injuries.	(8)
Q.3	After establishing the factual position, IO's second responsibility was to gather evidence at the crime scene. The evidence collected for laboratory examination included fingerprints and footprints. Classify the fingerprint patterns and explain any two methods that can be used for the visualization of latent fingermarks.	(8)

Part: B

(Answer **any two** of the following questions.)

Q.4	Tens of thousands of people were killed and scores more were injured by a huge earthquake that had struck south-eastern Turkey, near the Syrian border, in February 2023. This incident occurred in the early hours of the morning when people were inside their houses and sleeping resulting in more deaths being reported. Explain the scientific methods used for evaluating the personal identification of the deceased.	(8)
Q.5	In 2022, a man was arrested in connection with the murder of his wife in Hyderabad, India. The police found that the man had used a .32-bore revolver to shoot his wife. The forensic team collected evidence from the crime scene and sent it to the forensic laboratory for analysis. The forensic report confirmed that the bullet recovered from the victim's body matched with the bullet being used in the revolver recovered from the accused. This evidence helped the police to build a strong case against the accused and	(8)

he was convicted of murder. Explain the process of forensic ballistics examination in the given case and frame an expert opinion.

Q.6 Read the statement and answer the following questions: (8)

- a) "Forensic science is the application of scientific methods and techniques to investigate crimes and other legal issues. The principles of forensic science have a direct impact on criminal proceedings". Justify the above statement based on the seven basic principles of forensic science.
- b) "The multimodal biometric system is more reliable in crime detection as it involves two biometric pieces of evidence to enhance the result". Justify the above statement based on the biometrics verification process.
