

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
MGU-UGP (HONOURS) BSc DEGREE EXAMINATION 2026
FUNDAMENTALS OF FORENSIC CHEMISTRY
COURSE CODE: MG3DSECHEA06 (DSE)

Duration: 2 Hours

Maximum Marks: 70

*Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S),
Interest(I) and Appreciation(Ap)*

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

Part A

SHORT ANSWER QUESTIONS

Answer any 5 questions

Each question carries 4 Marks

1. What does the phrase "Crime Scene Never Lies" mean? [CO 3] [U]
2. Why is physical evidence more reliable than eyewitness testimony? [CO 3] [An]
3. Why is evidence preservation important in forensic chemistry? [CO1] [An]
4. State and explain Locard's exchange Principle. [CO1] [U]
5. List and briefly explain the stages of investigation in the correct sequence. [CO 2] [An]
6. Compare the Frye Standard and Daubert Standard for the admissibility of scientific evidence. [CO2] [U]
7. Define crime scene photography and state its two main purposes in forensic investigation [CO4] [U]

(4X5=20)

Part B

SHORT ESSAY QUESTIONS

Answer any 5 questions

Each question carries 7 Marks

8. Explain the objectives and principles of forensic chemistry [CO 1] [An]
9. Explain the role of chemists in identifying, analysing and interpreting physical and chemical evidence [CO1] [U]
10. Describe the three-tier system of crime scene photography [CO2] [U]
11. Explain any four presumptive chemical tests used in forensic screening, stating the substance each detects [CO2] [An]
12. Explain the objectives of safety precautions at crime scenes [CO 3] [An]
13. Define biohazards. Explain the common biohazards encountered at crime scenes [CO 3] [U]
14. A crime scene contains several pieces of physical evidence whose position may change during investigation. Apply the purpose of crime scene documentation to demonstrate the effectiveness of systematic documentation in recording and interpreting the original conditions of the scene [CO4] [A]

(7X5=35)

PART C

Answer any 1 question

Each question carries 15 marks

15. Define a crime scene. Explain its characteristics, scope and importance in criminal investigation
[CO 3] [An]
16. List and describe the major components of a chain of custody record [CO 4] [U]

(15X1=15)