

C 42005

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Name.....

Reg. No.....

**FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, APRIL 2023**

(CBCSS)

Forensic Science

FSC 4E 30—SCIENTIFIC PROTOCOLS FOR FIRE INVESTIGATION

(2020 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

**Section A**

*Answer any **four** questions.  
Each question carries 2 weightage.*

1. What are incendiary devices ?
2. Differentiate between backdraft and rollovers.
3. What is a char pattern ?
4. List the various classes of fire.
5. Define fire triangle.
6. State the significance of headspace chromatography in analysis of ignitable residues.
7. Define Alligatoring.

(4 × 2 = 8 weightage)

**Section B**

*Answer any **four** questions.  
Each question carries 3 weightage.*

8. Write a note on various modes of heat transfer.
9. Explain the process of interior examination in a vehicular fire.
10. Write a short note on fire patterns.
11. Discuss the development of fire.

**Turn over**

12. What are ILR ? Give the significance of its analysis.
13. Discuss on behaviour of fire in indoor fire case.
14. Discuss on distillation of fire exhibits and its chromatographic analysis.

(4 × 3 = 12 weightage)

### Section C

*Answer any two questions.*

*Each question carries 5 weightage.*

15. Write briefly on the collection preservation packaging of evidences at a fire scene.
16. Discuss on systematic analysis of fire debris.
17. Elaborate on different types of fire extinguishers.
18. Write a detailed note on reconstruction of fire scene.

(2 × 5 = 10 weightage)