

D 143185**(Pages : 2)****Name.....****Reg. No.....****FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2026****(CBCSS)****Forensic Science****FSC4E30—SCIENTIFIC PROTOCOLS FOR FIRE INVESTIGATION****(2020 Admission onwards)****Time : Three Hours****Maximum : 30 Weightage****Section A***Answer any **four** questions.*

1. What is an incendiary device ?
2. What are 'backdraft' and 'rollovers' ?
3. What is the cause for char pattern ?
4. What are the various classes of fire ?
5. Define fire tetrahedron.
6. Elucidate the significance of headspace chromatography in analysis of Hydrocarbon residues.
7. When does alligating occur ?

(4 × 2 = 8 weightage)**Section B***Answer any **four** questions.*

8. What are the various modes of heat transfer ?
9. Write a brief on fire patterns
10. Explain the process of interior examination in a compartmental fire.
11. What are fire patterns ?

Turn over

12. Discuss the development of fire.
13. What are ILR ? Give the significance of its analysis.
14. Discuss on the elimination of accidental causes of fire.
15. Discuss on the degree of evaporation on inflammable debris in an exhibit.

(4 × 3 = 12 weightage)

Section C

*Answer any **two** questions.*

16. Write briefly on the chemistry and behaviour of fire.
17. Discuss the different types of fire extinguishers.
18. Elaborate on systematic analysis of fire debris.
19. Describe the reconstruction of a fire scene. What are the indicators for arson ?

(2 × 5 = 10 weightage)