D 121264 **(Pages : 2)** **Name.....**

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, APRIL 2025

(CBCSS)

Forensic Science

FSC4E29—EXPLOSIVE ANALYSIS AND POST BLAST INVESTIGATION

(2020 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

Section A

Answer any **four** *questions.*

1. Expand the following : (A) ANFO ; and (B) HMX.
2. Give any *four* characteristics of a high explosive compound.
3. Mention any *two* cation tests used in the analysis of explosive residues.
4. Mention the category of explosives under which the following is classified according to use :
   (a) TNT . (b) Fulminate.
5. What is Brisance ?
6. What are Initiators ?
7. What is the application of HPLC in explosive residual analysis ?

(4 × 2 = 8 weightage)

Section B

Answer any **four** *questions.*

8. What are IED's ?
9. Write a note on the different type of detonating mechanisms used in explosives.
10. Describe the characteristics of low explosives.

Turn over

11. Write in brief on the Inorganic and Water extract for analysis of explosive residues.

12. Write in brief the important aspects of collection of post-blast residue.

13. Give any *two* colour tests for nitrates.

14. Write a note on TATP.

(4 × 3 = 12 weightage)

Section C

Answer any **two** *questions.*

15. An explosion has been reported. You are summoned by the investigating officer to the scene. How will you proceed to the blast site and do the post blast residue collection.

16. A broken clock along with a safety fuse, broken metallic needle and damaged batteries with an irregular circuit wire was obtained at an explosive scene. What inference will you draw from these ?

17. Elucidate the systematic examination of explosive residues in a forensic laboratory.

18. Give the classification of explosives with examples for each.

(2 × 5 = 10 weightage)