D 150322 **(Pages : 2)** **Name.....**

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE (CBCSS) REGULAR / SUPPLEMENTARY EXAMINATION, NOVEMBER 2026

Forensic Science

FSC3E18—MODERN AND APPLIED ANALYTICAL FORENSIC CHEMISTRY

(2019 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

I. Answer any *four* of the following (Short Answer type questions)

1 Give the method of calculation of Flash Point for Petrol (Motor Spirit)

2 Write a note on 'hot-spot' formation in an explosion scene.

3 Give a brief on deflagration.

4 What is the importance of saponification values in lipids ?

5 Give the caused for rancidity in oils.

6 Give the significance of Quantification in Narcotic substance analysis.

7 What are the colour tests made to detect MDMA ?

(4 × 2 = 8 weightage)

II. Answer any *four* of the following (Short essay type questions)

8 Describe the tetrahedron of fire.

9 Write a note on explosive power index.

10 Explain the dynamics of fire.

11 Write a note on the determination of the Cetane Number for Disel.

12 How is the presence of argemone oil detected in edible oils ?

13 Explain the conduction of Marquis Test

14 How are Amphetamines detected in a sample ?

(4 × 3 = 12 weightage)

Turn over

III. Answer any *two* of the following (Long essay type questions)

15 What are malpractices in petroleum products ?

16 Discuss How do you determine the presence of TNT in exploded debris ?

17 Elucidate on the standard methods of analyzing an unknown brown, paste like substance.

18 Describe the role og quality assurance in fire debris analysis.

(2 × 5 = 10 weightage)

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