

D 111164

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, NOVEMBER 2024**

(CBCSS)

Forensic Science

FSC 3E 18—MODERN AND APPLIED ANALYTICAL FORENSIC CHEMISTRY

(2020 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

I. Answer any *four* of the following. Short Answer Type Questions. Weightage 2 :

- 1 Define Iodine Value or Iodine Number and state its significance.
- 2 Give the significance of Fast Blue B test.
- 3 Write a note on characteristics of petrol.
- 4 Calculate the oxygen balance of RDX.
- 5 Define :
 - a) Pour point ; and
 - b) Smoke point.
- 6 Give the classification of Barbituraates.
- 7 Write a short note on Boudins test.

(4 × 2 = 8 weightage)

II. Answer any *four* of the following. Short Essay Type Questions. Weightage 3 :

- 8 Write a note on Marquis test and Zwikker test.
- 9 Mention the test for detection of Argemone Oil.
- 10 Explain the instrumental analysis of petroleum adulteration.
- 11 Discuss about the mechanism of deflagration ?
- 12 What are ILR ? Give the significance of its analysis.

Turn over

13 Explain various spectroscopic techniques used in analysis of drugs of abuse.

14 Discuss about the analysis of Organic extract from post blast residue.

(4 × 3 = 12 weightage)

III. Answer any *two* of the following. Long Essay Type Questions. Weightage 5 :

15 Mention the standard methods of analyzing adulteration on petroleum products.

16 Elaborate on fire patterns to determine the origin of fire as a forensic investigator.

17 Write a detailed note on classification of explosives.

18 Give the toxicological analysis of benzodiazepines from visceral sample.

(2 × 5 = 10 weightage)