D 114570 (Pages : 2) Name..

Reg. No.....................................

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

(CBCSS)

Forensic Science

FSC 1C 04—LABORATORY QUALITY MANAGEMENT, RESEARCH METHODOLOGY AND STATISTICS

(2020 Admission onwards)

Time : Three Hours   Maximum : 30 Weightage

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

1 Write a short note on regulatory requirements for implementing LIMS.

2 Briefly write on "Applied research".

3 Discuss on "semantic differential".

4 What is qualitative research ?

5 Write in brief about scope of ISO 17025.

6 Define Type I and Type II error.

7 Describe random variable.

(4 × 2 = 8 weightage)

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

8 Discuss on "impact factor" of journals.

9 Write on "management requirements" in ISO 17025 standard.

10 Explain about sub-contracting of tests and calibrations.

11 Write about work flow in a research laboratory.

12 Briefly explain on corrective and preventive action in ISO 17025.

Turn over

13   What are the applications of Chi-Square ?

14   Write a short note on linear regression ?

                         $(4 \times 3 = 12$ weightage$)$

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

15   Write in detail about laboratory safety.

16   Explain about sampling and types of samples in research.

17   Discuss in detail about designing and acquisition of LIMS.

18   Obtain the equations of two lines of regression for the following data. Also obtain the estimate of X for Y = 70.

X	:	65	66	67	67	68	69	70	72
Y	:	67	68	65	68	72	72	69	71

                         $(2 \times 5 = 10$ weightage$)$