D 52810	(Pages : 2)	Name
		Reg. No

FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, NOVEMBER 2023

(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 LIMS.
 - 2 Briefly write on "methodology" in research.
 - 3 Discuss on purchasing and inventory management in line with LIMS in an analytical laboratory.
 - 4 What do you understand by the term "process control" in an analytical laboratory?
 - 5 What is longitudinal research?
 - 6 Define Statistics and describe the importance of Statistics.
 - 7 Define Probability.

 $(4 \times 2 = 8 \text{ weightage})$

- II. Answer any four of the following. Short Essay Type Questions. Weightage 3:
 - 8 Discuss on occurrence management
 - 9 Write on the need for analysis before acquisition of LIMS
 - 10 Write a brief note on Action research
 - 11 Briefly explain about laboratory assessment for quality management
 - 12 Write on system analysis and design in LIMS.

Turn over

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- 13 Define probability of Type I error, probability of Type II error, level of significance and power of the test.
- 14 Find the Geometric mean and Harmonic mean of the following data:

X : 4 6 9 11 15

 $(4 \times 3 = 12 \text{ weightage})$

- III. Answer any two of the following. Long Essay Type Questions. Weightage 5:
 - 15 Write in detail about types of research
 - 16 Explain about the laboratory quality management in an analytical laboratory.
 - 17 Discuss in detail about work flow in different types of laboratories.
 - 18 Explain different types of graphical representation of frequency distribution through example.

 $(2 \times 5 = 10 \text{ weightage})$