2/31

2811E838

Candidate's Seat No :_____

M.Sc Sem-3 Examination

504

MLT

November-2024

Time : 2-30 Hours]

[Max. Marks : 70

Q1A	Explain the type of data in detail.	7 Marks
Q1B	Explain variable in detail.	7 Marks
	OR	
Q1A	Write a detailed note on data collection method in research.	7 Marks
Q1B	Write a note on role in biostatistics in MLT.	7 Marks
Q2A	What is the difference between parametric tests and non-parametric test? Explain in detail with examples.	7 Marks
Q2B	Write down a detailed note on ANOVA.	7 Marks
	OR	
Q2A	Write a note on student's t test and its use in research.	7 Marks
Q2B	Explain hypothesis testing in detail.	7 Marks
Q3A	What are the key differences between sampling error and non-sampling error in the context of research studies, and how do they impact the accuracy of the results?	7 Marks
Q3B	Write a note on sampling and characteristics of good samples.	7 Marks
	OR	
Q3A	How do qualitative and quantitative research methods differ in terms of their approaches, data collection techniques, and the types of insights they provide?	7 Marks
Q3B	Write a note on sample size determination.	7 Marks
Q4A	Why is data integrity crucial in scientific research? Explain how maintaining data integrity impacts the validity of research findings and the trustworthiness of results.	7 Marks
Q4B	Explain the importance of research ethics in laboratory settings. Discuss how ethical principles help ensure integrity, accountability, and transparency in scientific research.	7 Marks
	OR	
Q4A	What is the significance of responsible conduct in laboratory research? Provide examples of unethical practices that could undermine the credibility of laboratory findings.	7 Marks
Q4B	Discuss the ethical importance of accurate reporting in scientific research. Why is it essential to avoid data manipulation, and what consequences might arise from falsifying research results?	7 Marks
Q5	**Answer the following questions (Any Seven)**	**14 Marks**
I	Define Biostatistics.	2 Marks

(P.T.O)

E838-2

II	What is Interval and ratio scale?	2 Marks
III	What are advantages and disadvantages of secondary data collection?	2 Marks
IV	What is false negative error?	2 Marks
V	Write a name of the test for qualitative data.	2 Marks
VI	What is kurtosis and skewness?	2 Marks
VII	Define research and list out its types.	2 Marks
VII	Explain snowball sampling with example.	2 Marks
IX	Explain desired confidence level.	2 Marks
X	What are the consequences of manipulating research data?	2 Marks
XI	How can bias in data analysis affect the outcomes of a study?	2 Marks
XII	Why is patient confidentiality important in research, and how can it be protected?	2 Marks

BEST OF LUCK