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(21225)

Roll No.

M.Sc.-III Sem.

PG-3640

M.Sc. Examination, Dec.- 2025

MEDICAL MICROBIOLOGY

Bio- Statistics and Medico- Informatics

(MM-304)

Time : Three Hours]

[Maximum Marks : 50

Note : Attempt questions from **all** sections as per instructions.

Section-A

Note : Attempt all **Five** questions. Each question carries 02 marks. $5 \times 2 = 10$

1. Differentiation between Input and Output Unit.
2. What is Software?

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3. ... What is Bioinformation and How it is different from Confrontational Biology?
4. Write Names of four Protein Sequences Data bases.
5. What do you understand by various Measures of Central Tendency?

Section-B

Note : Attempt any **two** questions out of the following three questions. Each question carries 5 marks. $2 \times 5 = 10$

6. What is the difference between Arithmetic unit and Logic unit? Give an Account of the classification of computers according to Logic and Size.
7. What do you understand by Probability? Briefly explain the basic concepts related to probability theory.

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8. Write short notes on:
- Binomial and Poisson distribution along with their application in biology.
 - Advantages of Database system over file systems.

Section-C

Note : Attempt any **three** questions out of the following five questions. Each question carries 10 Marks. $3 \times 10 = 30$

- Give an account of Various Generations of Computers along with changes occurred at every level.
- What do you understand by Data Models in any Database system? Briefly explain Relational, Network and Hierarchical Model with suitable diagrams and basic terminologies in each.

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P.T.O.

- What is BLAST? How and where does it Work? Briefly explain basic steps of its algorithms. Also discuss its types and uses.
- Write short notes on:
 - Measures of Dispersion
 - Correctional and Regression
 - Difference between normal and skewed Distribution
 - Errors in Hypothesis Testing
- What do you understand by ANOVA? How an ANOVA test can be used in the field of Microbiology? Briefly explain with suitable examples.

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