M.Sc. BIOSTATISTICS EXAMS
SECOND YEAR
PAPER II – APPLIED MULTIVARIATE ANALYSIS AND TIME SERIES ANALYSIS

Q.P. Code: 282866

Time: Three hours   **Maximum: 100 Marks**

I. Elaborate on: (2 x 20 = 40)

1. Explain the concept of principle component analysis and how does this procedure is used in your study?

2. Write down the minimum Excepted Cost of Misclassification (ECM) rule for assigning a new item to one of the two populations.

II. Write notes on: (10 x 6 = 60)

1. Explain quadratic classification rule.

2. Write down any three similarity measures.

3. Describe the application of time series analysis through an epidemic example.

4. Explain the component of the time series.

5. When a process is said to be stationary?

6. Distinguish between collinearity and multicollinearity.

7. Distinguish between ARMA and ARIMA.

8. Describe the features of any two forecasting models.

9. Explain how moving average process can be used in epidemiology.

10. Write a critical note on Path analysis.

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