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: $(2 \times 20 = 40)$

1. Discriminant analysis and its application to epidemiology.

- 2. a) Autoregressive models.
 - b) Moving average method of forecasting.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Expected cost of Misclassification rule.
- 2. Goodness of fit in factor analysis.
- 3. Difference between hierarchical and non-hierarchical cluster analysis.
- 4. Factors analysis.
- 5. Quadratic classification rule.
- 6. Trend and seasonal components of time series analysis.
- 7. Simple exponential smoothing in forecasting.
- 8. ARMA model.
- 9. Partial auto correlation function.
- 10. Multiplicative decomposition of time series data.
