SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.
M.Sc.(BioStats) - END SEMESTER EXAMINATIONS APRIL - 2023
SEMESTER - IV
20PBSET4004 - Forecasting and Decision Making Techniques

Total Duration : 2 Hrs. 30 Mins.   Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30$ Marks)

1. Describe the business forecasting and explain the process of forecasting techniques.
2. Write a Comparative account on averaging and smoothing methodologies in forecasting.
3. Relate autoregressive and moving average models in forecasting techniques.
4. Classify decision making process and environment.
5. What is time series? Indicate its four components with suitable illustrations.
6. Prepare exponential smoothing adjusted for trend in forecasting.
7. Relate ARMA (p,q) and ARIMA (p,d,q) with example. Point out when ARIMA model reduces to ARMA model.
8. Examine decision tree analysis with decision tree diagram.

Section C

I - Answer any **TWO** questions $(2 \times 10 = 20$ Marks)

9. Prepare different forecasting error based on various error measurements.
10. Classify seasonality and seasonally adjusted data in time series analysis.
11. Justify, Winter's smoothing model performs better than Holt's model.
12. Evaluate the model building strategies for Box-Jenkins approach.

II - Compulsory question $(1 \times 10 = 10$ Marks)

13. Discriminate decision under uncertainty and decision under risk with different decision criterion.

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