M.Sc. DEGREE EXAMINATION,APRIL 2020
II Year IV Semester
Forecasting and Decision making Techniques

Time : 3 Hours **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Define forecasting.
2. What is meant by forecasting errors?
3. State the methods of averages in forecasting.
4. What do you understand by smoothing techniques?
5. Write the components of Time series.
6. Define trend in forecasting.
7. When is meant by stationary process?
8. Point out the difference between ARMA and ARIMA.
9. Define expected monetary value.
10. What is maximin and minimax criterion?
11. When a variation is said to be cyclical?
12. Define decision under uncertainity.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. Write short notes on forecasting errors.
14. Discuss double moving averages with an example.
15. Briefly explain irregular variations.
16. Explain ARMA model.
17. Write short notes on expected Value of Perfect Information.
18. Explain Laplace criterion.
19. Briefly explain auto regressive model in forecasting.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Explain forecasting methods in detail.
21. Discuss in detail smoothing methods.
22. A study of deman(di) for the past 12 years(t= 1,2,...12) has indicated the following:

$$d_i = \begin{cases} 100 & ; \ t = 1, 2, ...5 \\ 20 & ; \ t = 6 \\ 100 & ; \ t = 7, 8, ...12 \end{cases}$$

Compute a 5-yearly moving average.

23. Explain Box-Jenkins methodology.
24. Explain decision tree analysis.

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