

Roll No.

Total No. of Pages : 03

Total No. of Questions : 10

MBA (Sem.-4)
BUSINESS FORECASTING

Subject Code : MBA-964-18

M.Code : 78032

Date of Examination : 15-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A contains EIGHT questions carrying TWO marks each and students have to attempt ALL questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and students have to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and consists of ONE Case Study carrying TWELVE marks.

SECTION-A

1. Write short notes on :

- a. What is Demand Analysis?
- b. What is the Elasticity of Demand?
- c. What is Time Series Analysis?
- d. What are consumer clinics?
- e. What is meant by stochastic time series?
- f. What is meant by linear time series?
- g. What is exogeneity?
- h. What is meant by causality?

SECTION-B

UNIT-I

2. Why do managers need to know demand forecasting techniques to manage business organizations in the present era? Explain by citing examples.
3. **Write notes on :**
 - a. Determinants of demand forecasting.
 - b. Role of types of users in demand forecasting.

UNIT-II

4. Discuss in detail the advantages and limitations of time series and cross-sectional data collection methods. Explain by citing examples.
5. **Write notes on :**
 - a. Unconditional forecasting.
 - b. Time Series Regression.

UNIT-III

6. **Write notes on :**
 - a. What are the properties of Stochastic Time Series?
 - b. Applications of ARIMA model.
7. Discuss in detail the applications of Time-Series Analysis. Explain by citing examples.

UNIT-IV

8. Discuss in detail the ARCH process. Compare it with GARCH process.
9. **Write notes on :**
 - a. Smoothing technique.
 - b. Short and long-term forecasting.

SECTION-C

10. Case Study :

The results of previous researchers show that combining different forecasts will significantly improve demand forecasting performance. Although a significant amount of research has been published on combining forecasts, the choice of which method should be used in a particular situation is not always clear. Over the last forty years, many combining methods have been proposed. These methods range from the simple average to much more sophisticated approaches to determine optimal combinations. The simple average is reported to perform well in many published studies. The simple average has the advantage of being uncomplicated and robust, which, in a context where hundreds or thousands of items have to be periodically forecast, is a very attractive feature. Another approach, known as outperformance, gives different weights to individual forecasts. Each weight is made proportional to the probability that the respective forecasting method will have the best individual performance. Each probability may be estimated on the basis of the past performance of the alternative forecast methods and can be revised using a Bayesian analysis. It has the advantage of being robust and having an intuitive meaning. Researchers proposed an approach where weights are calculated to minimize the combination's error variance, assuming that each forecast is unbiased. Moreover, this method is equivalent to a least squares regression in which the constant is suppressed, and the weights are constrained to sum to one. Researchers thus proposed a regression method, where individual forecasts are used as repressors, and the combining weights are not restricted, arguing that this has the advantage of producing an unbiased, combined forecast even when individual forecasts are biased.

Question :

How do you support the statement that combining different forecasts will significantly improve demand forecasting performance? From your subject knowledge, give justification with relevant examples to support this statement.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.