Roll No. | | | | | | | | | | | | Total No. of Pages : 03

Total No. of Questions : 17

MBA (Sem.–4)

BUSINESS FORECASTING

Subject Code : MBA-964-18

M.Code : 78032

Date of Examination : 15-07-22

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

Write short notes on :

1. What is demand analysis?
2. What is the purpose of forecasting?
3. What are consumer clinics?
4. What is time series regression?
5. What are mixed autoregressive models?
6. What is a forecasting error?
7. What are barometric techniques?
8. What is lagging?

SECTION-B

UNIT-I

9. Why do managers need to have the knowledge of business forecasting? Explain by citing examples.

10. Write notes on :

    a. Significance of demand analysis

    b. Significance of elasticity of demand.

UNIT-II

11. Discuss the need and relevance of forecasting with regressive models. Explain by citing examples.

12. Write notes on :

    a. Forecasting with serially correlated errors

    b. Time-series data collection.

UNIT-III

13. Write notes on :

    a. Applications of ARMAX models

    b. Applications of ARCH process.

14. Discuss the need and specification of ARIMA models.

UNIT-IV

15. Write notes on :

    a. Need for accuracy in forecasting

    b. Barometric techniques.

16. What are the advantages and limitations of the Exponential Smoothing technique?

SECTION-C

17. Case Study :

A top-tier telecom provider in Germany was looking to centralize procurement for all mobile devices it plans to sell in the future in global markets. In order to accurately manage product lines for each country, negotiate the best prices from handset vendors, and align promotions and subsidies with customer upgrade cycles, it needed to forecast demand six months in advance for handset devices at the Stock Keeping Unit (SKU) level. The forecasts will enable the telecom provider to better allocate inventory of handset models, reduce inventory costs, and increase re-contract rates to maximize sales productivity and Average Revenue Per User (ARPU). The project was complex because it required predicting future trends for every device model at the SKU level. Lynx Analytics had to factor in the influence of manufacturer discounts and product bundles on customer demand. The forecast needed historical data for sales and inventories for each SKU and distribution channel, but the carrier did not have a consistent method of identifying devices across systems. Lynx Analytics needed to find a way to cull appropriate data from relevant data sets. It also needed to predict demand for new handset models that do not have any history in the market.

Question :

a. "*As a student of business forecasting, according to you, which forecasting technique is best suited for the scenario discussed above and how the company can apply that technique*". Discuss in detail.

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.