

Time: 3 Hours

Max. Marks: 75

Answer any FIVE Questions One Question from Each Unit
All Questions Carry Equal Marks

UNIT-I

1. a Describe the key components of Business Analytics and explain how they support data-driven decision making. 8M
- b Elaborate on the scope of Business Analytics across various functional domains such as marketing, finance, HR, and operations. 7M

OR

2. a Explain the concept of data modelling and how probability distributions help in forecasting. 8M
- b Explain the different sampling techniques with suitable examples. 7M

UNIT-II

3. a Describe the importance of modelling relationships between variables. How does it help in business decision-making? 8M
- b Explain the concept of Simple Linear Regression and derive the regression equation. 7M

OR

4. a Discuss the key resources required for successful implementation of Business Analytics in an organization. 8M
- b Discuss the Business Analytics problem-solving process with an example. 7M

UNIT-III

5. a Describe how Business Analytics teams are managed. What steps help in improving teamwork and coordination? 8M
- b Explain the need for an Information Policy in Business Analytics. What points should be included while designing one? 7M

OR

6. a Explain what data quality means. How can organizations ensure good data quality for analytics? 8M
- b Describe any commonly used data mining methodologies in simple terms. 7M

UNIT-IV

7. a What are statistical forecasting models? Explain how they help in predicting future values using past data. 8M
- b Explain qualitative and judgmental forecasting. In what situations are these methods more useful than quantitative methods? 7M

OR

8. a Explain regression forecasting using causal variables. How does including external factors improve forecasting accuracy? 8M
- b What is a stationary time series? Describe any forecasting model used for stationary data 7M

UNIT-V

9. a Explain the steps involved in formulating a decision problem. Why is proper problem formulation important in decision analysis? 8M
- b What are decision strategies without outcome probabilities? Explain maximin, maximax, and minimax regret strategies with examples. 7M

OR

10. a Explain how visualization tools help in finding patterns and insights in business data. 8M
- b Explain how journalists use data analytics to report stories and trends. 7M