

Total No. of Questions : 10]

SEAT No. :

P2343

[Total No. of Pages : 3

[5254]-678

**B.E. (Computer Engineering)**

**BUSINESS ANALYTIC AND INTELLIGENCE (Elective - IV-A)**  
**(2012 Pattern) (Semester - II)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Solve Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume Suitable data if necessary*

- Q1)** a) Describe the role of Business Intelligence in making a business successful. **[5]**
- b) Explain the process of Decision making in Business Intelligence System. **[5]**

OR

- Q2)** a) Explain various data visualization techniques in Decision Support System. **[5]**
- b) What are the obstacles to Business Intelligence in an Organization? **[5]**
- Q3)** a) Explain “Predictive Business Analytics” in detail. **[5]**
- b) What is concept hierarchy? Explain its importance in multidimensional cube. **[5]**

OR

- Q4)** a) Explain the distributed data warehouse architecture with suitable diagram. **[5]**
- b) Explain “Fact Constellation schema” with suitable example. **[5]**

**P.T.O.**

- Q5)** a) What is the need of data pre-processing? Explain various data cleaning techniques. [5]
- b) Explain the methods of measuring central tendency of data with example. [6]
- c) What is data normalization in data pre-processing? Explain following data normalization methods with example: [6]
- i) Min-Max normalization
  - ii) Z-score normalization

OR

- Q6)** a) What are outliers? Explain various types of outliers with suitable example. [6]
- b) Explain clustering based methods of outlier detection with examples. [6]
- c) What is OLAP? Explain Roll-up and Slice operations with example. [5]
- Q7)** a) Explain the following terms used in management of BI infrastructure. [6]
- i) Capacity Planning
  - ii) BI Tools
- b) Explain the need of Scalability in Business Intelligence infrastructure. [6]
- c) What is business continuity (BC)? Explain Resilience in terms of BC. [5]

OR

- Q8)** a) Explain the following terms used in management of BI infrastructure. [6]
- i) Performance Tuning
  - ii) Security Management
- b) Explain the concept and importance of maintaining Business Intelligence systems. [5]
- c) Explain Recovery and Contingency in terms of business continuity. [6]

- Q9)** a) Explain the need and role of BI in improving various business functionalities. [6]
- b) Write a short note on [6]
- i) Business Analytic
- ii) CRM
- c) Explain the application of business intelligence for detection of intrusion in network system. [4]

OR

- Q10)**a) Explain the application of Business Intelligence in banking. [8]
- b) Consider the database of an online retail Shoppe like Big Bazar. Use suitable business intelligence techniques and derive discounts for various items in the shop, for a particular week, to increase the profitability. Explain the techniques used for the same. [8]

