

**B.E. (Computer Engineering)**  
**BUSINESS ANALYTIC & INTELLIGENCE**  
**(2012 Pattern) (Elective - IV (A)) (Semester-II)**

Time : 2  $\frac{1}{2}$  Hours/

[Max. Marks : 70]

Instructions to the candidates:

- 1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data if necessary.

Q1) a) What are the challenges to make Business Intelligence system successful in an Organization? [5]

b) What is the role of mathematical model in Business Intelligence? [5]

OR

Q2) a) Explain various data mining techniques in Decision Support System. [5]

b) What is ad-hoc query analysis? Explain how Business Intelligence can help in solving ad-hoc queries. [5]

Q3) a) Explain "Descriptive Business Analytics" in detail. [5]

b) Explain how concept hierarchy can be built and used in OLAP operations, for a dimension "location of customers" database in a data warehouse. [5]

OR

Q4) a) Write a short note on Distributed Data Warehouse. [5]

b) Explain "Snowflake schema" with suitable example. [5]

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b) Explain the methods of measuring dispersion of data with examples. [6]  
 c) What is data normalization in data pre-processing? Explain following data normalization methods with example. [6]

i) Min-Max normalization.

ii) Decimal Scaling normalization.

OR

Q6) a) What are outliers? Explain various outlier detection methods with suitable example. [8]

b) Explain Drill Down, Dice and Pivot operations with example. [6]

c) Define and differentiate between ROLAP and MOLAP. [3]

Q7) a) Explain various requirements to set up Business Intelligence infrastructure. [6]

b) Explain the need of "Availability" in Business Intelligence infrastructure. [6]

c) Write a short note on "Business Continuity". [5]

OR

Q8) a) Describe various steps in designing Business Intelligence System. [6]

b) Explain the concept and importance of managing Business Intelligence systems. [6]

c) How to handle challenges involved in implementing BI infrastructure for an organization? [5]

**Write a short note on:**

- i) Data Analytics.**
- ii) ERP.**
- b) Explain the application of Business Intelligence for Retail Shop Management. [8]**

**OR**

- Q10) a) Explain the application of Business Intelligence for Finance management in an organization. [8]**
- b) Assume the appropriate database about physical fitness of university students. Name which business intelligence technique(s) can be used to detect physically “very strong” and “very weak” players. Explain the technique (s) in detail. [8]**

