

Total No. of Questions : 8]

SEAT No. :

PE-2190

[Total No. of Pages : 2

[6584]-89

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

**BUSINESS INTELLIGENCE**

**(2019 Pattern) (Semester - VIII) (410253 C) (Elective-VI)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :*

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

- Q1)** a) State the different types of reports with their applications. [6]  
b) Explain the multidimensional data model with example [6]  
c) State the difference between relational and multidimensional data model. [6]

OR

- Q2)** a) Suggest the use of Data grouping & Sorting, Filtering Reports. [6]  
b) Explain the Relational data model with example. [6]  
c) Explain the detail Drill up and Drill Down. [6]

- Q3)** a) Explain data reduction in detail with example. [7]  
b) What is data Transformation? Explain Data transformation Process in details. [5]  
c) Explain data validation, incompleteness, noise, inconsistency of quality of input data. [5]

OR

- Q4)** a) What is Contingency Table? What is Marginal Distribution? Justify with suitable example. [7]  
b) Write short notes on data discretization. [5]  
c) Explain the following Data Reduction technique: Sampling, Feature selection, Principal components analysis. [5]

*P.T.O.*

- Q5) a)** What is logistic regression? Discuss the types of logistic regression. [6]
- b) What is the difference between hierarchical clustering and partitioning method? [6]
- c) What is decision tree? Explain with a case study. [6]

OR

- Q6) a)** Define - frequent item set, Minimum Support Count, Hierarchical Clustering, Regression. [6]
- b) What are the association rules? How to evaluate them using support and confidence? Explain with Example. [6]
- c) Explain the logistic regression with example. [6]

- Q7) a)** Define Business Intelligence. List and explain any 3 tools for Business Intelligence. [6]
- b) Write a note on BI Applications in CRM. [6]
- c) What are the advantages of Business Intelligence in ERP. [5]

OR

- Q8) a)** Justify how BI is useful for Customer Relationship Management. [6]
- b) Explain the Role of BI in finance and marketing. [6]
- c) State the role of Data Analytics in any business with example. [5]

