

Total No. of Questions : 8]

**PD4597**

SEAT No. :

[Total No. of Pages : 2

[6404]-102

**B.E.(Computer Engg.)**

**BUSINESS INTELLIGENCE**

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

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

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

- Q1)** a) Explain in detail business intelligence architectures with suitable diagram. [6]  
b) Explain the role of mathematical models in BI. [6]  
c) What is data, information and knowledge explain with suitable examples. [5]

OR

- Q2)** a) Explain different types of report in detail. [6]  
b) Explain Decision Support System in detail. [6]  
c) Write short note on Ethics and business intelligence. [5]
- Q3)** a) Explain data reduction in detail with example. [7]  
b) Difference between Univariate, Bivariate, Multivariate analysis [5]  
c) Write a short note on data discretization. [5]

OR

- Q4)** a) Explain data exploration in detail with example [7]  
b) Explain Data transformation in detail with example. [5]  
c) Write short note on Data Validation. [5]
- Q5)** a) Explain Association rule and its types. [5]  
b) Write a short note on Classification. [5]

*P.T.O.*

- c) Consider the following dataset and we will find frequent item sets and generate association rules for them using Apriori algorithm, Consider minimum support count is 2 & minimum confidence is 60%. [8]

TID	Items
T1	I1, I2, I5
T2	I2, I4
T3	I2, I3
T4	I1, I2, I4
T5	I1, I3
T6	I2, I3
T7	I1, I3
T8	I1, I2, I3, I5
T9	I1, I2, I3

OR

- Q6)** a) Explain Bayes theorem in detail. [5]  
 b) Difference between Classification and Clustering. [5]  
 c) Explain Logistic regression in detail with example. [8]

- Q7)** a) Explain applications of BI in telecommunication and banking. [6]  
 b) Explain BI application in Logistics and Production. [6]  
 c) Explain Role of BI in Finance and marketing. [6]

OR

- Q8)** a) Explain BI application in CRM. [6]  
 b) Explain Roles of Analytical tools in BI. [6]  
 c) Explain role of BI in ERP. [6]

