

Total No. of Questions : 10]

SEAT No. :

**P3179**

**[5461]-220 D**

[Total No. of Pages : 2

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

**BUSINESS ANALYTIC AND INTELLIGENCE**

**(2012 Course) (Semester-II) (Elective-IV (A)) (Open Elective)**

*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)** Draw and explain cycle of Business Intelligence. **[6]**

b) Differentiate between DBMS system and BI system. **[4]**

OR

**Q2) a)** Say whether each of the following is an example of data or information. **[6]**

i) The name of best selling News Paper

ii) 35209857

iii) The average marks for the assignment

b) Explain Business Intelligence Architecture with diagram? **[4]**

**Q3) a)** Design Decision Support System for Medical application to predict whether disease is Positive or Negative for a particular patient. Assume suitable dataset and model. **[6]**

b) Explain components of Decision support system with diagram. **[4]**

OR

**Q4) a)** Explain Drill Down and Pivot operations of OLAP with example. **[6]**

b) What is snapshot materialized view? Give one example of Snapshot materialized view. **[4]**

**P.T.O.**

- Q5)** a) What are outliers? Explain various types of outliers with suitable example. [8]  
b) Suppose for the attribute income mean value is \$ 54000 and standard deviation is \$ 16,000. Normalize income value \$ 73,600 using Z-score normalization method. [5]  
c) For the given data for Book Price (in dollars), apply Binning mean technique for smoothing the noise. 15, 21, 21, 29, 34, 24, 4, 8, 9, 25, 26, 28. [4]

OR

- Q6)** a) Explain distance based and density based method of outlier detection with example. [10]  
b) List and explain the different challenges in outlier detection. [7]
- Q7)** a) Explain the concept of Business Intelligence Infrastructure. Explain and Draw suitable diagram for BI Infrastructure requirements. [10]  
b) Explain various BI operations required for business continuity. [7]

OR

- Q8)** a) Explain the techniques of managing and maintaining Business Intelligence systems. Why it is important to maintain BI Systems? [10]  
b) List and explain important factors for planning BI system scalability. [7]

- Q9)** a) Explain Market Basket analysis with example for Marketing application. [10]  
b) Explain the application of Business Intelligence in Banking. [6]

OR

- Q10)** a) Explain BI Applications in Credit Card Fraud Detection with suitable example. [10]  
b) Write short note on: [6]  
i) Data Analytics  
ii) Business Analytics

