

Total No. of Questions : 12]

SEAT No. :

P3425

[4959]-200

[Total No. of Pages : 3

B.E. (IT)

BUSINESS INTELLIGENCE

(2008 Course) (Semester - II) (Open Elective) (414451)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Draw neat diagrams wherever necessary.*
- 2) Assume suitable data, if necessary.*
- 3) Figures to the right indicate full marks.*

SECTION - I

Q1) a) Compare analytical queries and transactional queries. **[8]**

b) Explain the process of business intelligence. **[8]**

OR

Q2) a) Explain the application where OLAP is more suitable than OLTP. Justify. **[8]**

b) Explain with the help of diagram various components of data warehouse. **[8]**

Q3) a) Suppose that a data warehouse consists of the four dimensions date, spectator, location and game and the two measures: count and charge where charge is the fare that a spectator pays when watching a game on a given date. Spectators may be students, adults or seniors, with each category having its own charge rate. Design the model using a suitable schema. Clearly specify facts. **[12]**

b) Define fact and dimension. **[4]**

OR

P.T.O.

- Q4) a)** Explain different types of SCDs with the help of examples. [8]
- b) Which one of star and snowflakes schema is demoralized? Explain its advantages and disadvantages. [8]

- Q5) a)** What is staging in ETL? Explain different mechanisms of data staging?[9]
- b) What are the challenges in extracting the data? Explain extraction phase of ETL. [9]

OR

- Q6) a)** What is loading of data in data warehouse? Explain initial and incremental loading. [9]
- b) Explain the need for data transformation. Discuss different methods.[9]

SECTION - II

- Q7) a)** With the help of neat diagram explain reporting architecture. [8]
- b) Explain the operations- drill down, drill up, slicing and dicing. [8]

OR

- Q8) a)** How are dashboards useful in reporting? [8]
- b) Explain various report elements. [8]

- Q9) a)** Explain any one hierarchical clustering technique. [8]
- b) How are decision trees formed? Explain any one method for selecting splitting attribute. [8]

OR

Q10)a) Write a short note on text mining. **[8]**

b) What are the challenges in time series data mining? How are they handled? **[8]**

Q11)a) Write a note on: HIVE and PIG. **[9]**

b) Explain Netezza. **[9]**

OR

Q12)a) What is real time and operational BI? **[9]**

b) How is BI deployed on cloud? **[9]**

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