P2027

[5254]-200

B.E. (Information Technology)
BUSINESS INTELLIGENCE
(2008 Course) (Elective - IV) (Open Elective)

Time : 3 Hours]   *[Max. Marks : 100*

Instructions to the candidates:

1) *Answers to the two sections should be written in two separate answer books.*
2) *Answer any three questions from each section. 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, Q,11 or Q.12.*
3) *Assume suitable data, if necessary.*
4) *Figures to the right indicate full marks.*

SECTION - I

Q1) a) Discuss design and implementation aspects of OLTP system.   **[8]**

b) Compare and contrast analytical queries with transactional queries. **[8]**

OR

Q2) a) Compare and contrast OLTP and OLAP.   **[8]**

b) Explain components of data warehouse architecture with neat diagram.**[8]**

Q3) a) Explain star, snowflake and fact constellation schema with example. **[8]**

b) Explain transaction, recurring/periodic and accumulating snapshot types of dimensional modeling.   **[8]**

OR

Q4) a) Anita is a customer with XYZ Inc. She first lived in Pune, Maharashtra. So, the original entry in the customer lookup table has the following record: Cust_id = 234, Cust_name= "Anita", State = "Maharashtra". At a later date, she moved to Indore, Madhya Pradesh on March, 2016. How should XYZ Inc. now modify its customer table to reflect this change? Elaborate three ways to handle this scenario.   **[8]**

b) What is difference between fact and grain? Explain additive and semi additive fact with example.   **[8]**

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Q5) a) What are late arriving facts in ETL? How are they handled? **[9]**

b) Explain architecture of ETL and ETL process. **[9]**

OR

Q6) a) What is loading of data in data warehouse? Explain initial and incremental loading. **[9]**

b) Explain Following terms w.r.t. ETL **[9]**

i) Data Quality

ii) Data enrichment

iii) Data staging

SECTION - II

Q7) a) List types of OLAP Servers. Explain any two OLAP Servers with its architecture. **[8]**

b) Explain different layers in reporting with their significance. **[8]**

OR

Q8) a) Write short note on Charts, Tables and Prompts. **[8]**

b) Explain ETL scheduling. How is data-level security implemented? **[8]**

Q9) a) Describe different steps in Text mining. What are the different issues to handle text data? **[8]**

b) Explain the concept & significance of Materialized View with suitable example. **[8]**

OR

*Q10)*a) What is regression? Explain linear and non-linear regression with example.**[8]**

b) Explain decision tree classification technique in detail. **[8]**

*Q11)*a) What is BIG Data? List the characteristics of BIG Data. Draw and explain the architecture of HIVE. **[9]**

b) Explain change data capture. Explain the significance of log-based techniques? **[9]**

OR

*Q12)*Write Short notes (any Three) **[18]**

a) BI on Cloud

b) Agile BI

c) Real time BI

d) PIG

e) Netezza

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