Seat No.:_____SARDAR PATEL UNIVERSITY

[74]

M.Sc. (Information Technology)
Semester – III External Examinations
PS03EINT02 (Data Mining and Data Warehousing)
28th October, 2016 (Friday)

Max. Marks: 70

Time: 2:00 PM to 5:00 PM

[08]

Q-1   **Choose most appropriate option for the following:**

1.   Data extraction takes data from _____ systems and makes it available to the data warehouse.
        A. Destination
        B. Source
        C. A and B both
        D. None of these

2.   _____ is a subject-oriented, integrated, time-variant, nonvolatile collection of data in support of management decisions.
        A. Data Mining
        B. Data Warehousing
        C. Web Mining
        D. None of these

3.   In _____ older data is removed from the system in a format that allows it to be quickly restored if required.
        A. Archiving
        B. Partitioning
        C. Self-learning
        D. None of these

4.   The _____ is the system component that performs all the operations necessary to support the query management process.
        A. Load manager
        B. Warehouse manager
        C. Query manager
        D. None of these

5.   Create _____ to speed up the common queries.
        A. Associations
        B. Classifications
        C. Aggregations
        D. None of these

6.   _____ is the information that is used to analyze the elemental transaction.
        A. Fact data
        B. Dimension data
        C. A and B
        D. None of these

7.   _____ are separate operations that occur within the confines of the SQL statement itself.
        A. Intra-statement operations
        B. Inter-statement operations
        C. Extra-statement operations
        D. None of these

8. A _____ is a backup that is taken while the database is completely shut down.
    A. Hot backup
    B. Cold backup
    C. Online backup
    D. None of these

Q-2 **Write answers in short:** *(ANY SEVEN)*   [14]
    a. Distinguish between data mining tools and query tools.
    b. What is data warehousing? List its characteristics.
    c. Explain metadata.
    d. Explain backup and recovery process.
    e. What is fact data? Explain it in brief.
    f. Explain starflake schemas.
    g. Distinguish between fact table design and summary table design.
    h. What is SLA? Explain it in brief.
    i. "The data warehouse is an operational system", Justify your answer.

Q-3 A Discuss machine learning and methodology of science.   [06]
    B Write in detail about project planning and management life cycle. [06]
                                OR
    B Explain benefits of data mining in marketing.   [06]

Q-4 A Explain clean and transform data process within a data warehouse. [06]
    B Write a short note on warehouse manager.   [06]
                                OR
    B Discuss query management process within a data warehouse.   [06]

Q-5 A Explain summary information in detail taking suitable example.   [06]
    B Write a short note on horizontal partitioning.   [06]
                                OR
    B Write a detail note on Advanced Encryption Standard.   [06]

Q-6 A List types of system managers. Explain any two of them.   [06]
    B Explain server hardware requirement of data warehouse environment. [06]
                                OR
    B Explain security requirements for data warehouse.   [06]

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