ALCCS

FEBRUARY 2009

Code: CS482   **Subject: DATA WAREHOUSE DESIGN & IMPLEMENTATION**
Time: 3 Hours   **Max. Marks: 100**

NOTE:
- **Question 1 is compulsory and carries 28 marks. Answer any FOUR questions from the rest. Marks are indicated against each question.**
- **Parts of a question should be answered at the same place.**

Q.1   **(7 x 4)**

    a. Explain atleast four benefits of granularity of data in warehouse design.

    b. Differentiate between OLTP systems and Decision Support systems.

    c. What are the different ways in which technology can support efficient index access?

    d. Write an algorithmic path to calculate the row/ space occupied by a data warehouse.

    e. How is the dimensional modeling tool better suited for a data warehousing as compared to the semantic data model like ER model?

    f. Mention one advantage and one disadvantage of multiple platforms in management of common detail in Distributed Datawarehouse.

    g. Discuss the advantages of a star schema.

Q.2   a. Discuss the structure of a data warehouse using a figure.   **(8)**

    b. Illustrate using a small example the term "Partitioning of data". Discuss in detail partitioning as design approach for a data warehouse.   **(10)**

Q.3   a. Explain the process of Normalisation in warehouses. List its advantages.   **(8)**

    b. Why is metadata necessary for using, for building and for administrating a data warehouse? **(10)**

Q.4   a. Discuss the complexities in transformation and integration of data.   **(8)**

    b. What is the difference between local and global warehouses?   **(10)**

Q.5   a. A warehouse is a subject-oriented, integrated, time-variant, and non-volatile collection of data in support of management's decision-making process. Explain.   **(8)**

    b. What is meant by drill down analysis? Explain its benefits to the manager.   **(10)**

Q.6   a. Give the stages of migration from a corporate data model to the architected environment. **(8)**

b. Discuss in detail, why it is advisable to keep summary data in the EIS and not in the detailed data.   **(10)**

Q.7   Write short notes on any **THREE** :

(i)   Language Interface in
warehouse.
(ii)   Lock Management.
(iii)   Spider web.
(iv)   Event mapping.
(6+6+6)