ALCCS

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

SEPTEMBER 2010

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 × 4)**

a. Which techniques can be used to make feedback loop harmonious?

b. Differentiate between Data warehouse and Data Mart.

c. What are the goals of a Data Warehouse? Explain.

d. Define extract program. What are its advantages?

e. When is design review performed? Who should be in a design review?

f. Explain primary and secondary data in the context of snapshots in the data warehouse.

g. Data warehouse is subject oriented and integrated. Comment.

Q.2 a. Give reasons for the iterative development of data warehouse. Also explain the role of data model in iterative development. **(10)**

b. What is stored in meta data in a data warehouse environment? **(4)**

c. Define OLAP cube. Mention its advantages and disadvantages over relational technology. **(4)**

Q.3 a. What are the four basic constructs found at the midlevel data model? Explain it with the help of an example. **(10)**

b. Explain the characteristics or features of a data warehouse? **(8)**

Q.4 a. Differentiate between Star Schema, Snowflake Schema and fact constellations with the help of a diagram. **(10)**

b. What are issues related to the use and storage of external data in the data warehouse? Also mention the methods to capture and store external information. **(8)**

Q.5 a. Discuss the basic components/ elements of the data warehouse with the help of a diagram. **(10)**

b. Differentiate between the following:
(i) OLTP and OLAP (ii) Database and Data Warehouse **(4+4)**

Q.6 a. Discuss three different types of distributed data warehouse. Explain local and global data warehouses. **(10)**

b. What is EIS? Explain it with the help of an example. **(8)**

Q.7 Write short notes on any **THREE** of the following: **(6+6+6)**

(i) ERP-oriented Corporate Data Warehouse
(ii) Data Warehouse Physical Data Model
(iii) Structuring Data in Data Warehouse
(iv) Granularity in Data warehouse Environment.