ROLL NO. _____

ALCCS – OLD SCHEME

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

AUGUST 2011

NOTE:

- **Please write your Roll No. at the space provided on each page immediately after receiving the Question Paper.**
- **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

a. Explain at least four benefits of granularity of data in warehouse design.

b. Differentiate between Data cleaning, data transformation and refresh.

c. Explain the four levels of data in the architectural environment.

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

e. Discuss the advantages of a star schema.

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

g. Explain the terms "Index Only Processing" & "Fast Restore". **(7 × 4)**

Q.2 a. Write short note on
(i) Techniques to make feedback loop harmonious. **(4)**
(ii) Data Migrations. **(4)**

b. Write in detail about the three data models used in Data Warehouse. **(10)**

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

b. Why is metadata necessary for using, building and 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. Differentiate between (i) Data Warehouse and MDBMS. (ii) OLAP and OLTP. **(5+5)**

b. Define & Differentiate between dimensional data modelling and relational data modelling. **(8)**

Q.6 a. Discuss the architecture of a data warehouse with the help of a diagram. **(8)**

b. Explain Drill-Down Analysis and Event Mapping in context of EIS. **(10)**

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

(i) Partitioning of Data in Data Warehouse.
(ii) Lock Management.
(iii) Data Marts.
(iv) Outlier Analysis **(6+6+6)**