

**Assignment No: 2**  
**Data Warehousing and Data Mining**  
**ETCS-310**

**Question 1.** Define the Following:

- (a) OLTP
- (b) Drill Down and Roll up
- (c) Joint Application Development
- (d) Star join and Star index

**Question. 2** (a) Explain the drill down and rolling up capabilities of an OLAP system in Detail with the help of example

- (b). Explain the STAR schema keys in detail

**Question. 3** (a) What is hypercube. How do they apply in an OLAP system.

(b) What is Fact less fact table. Design a simple STAR Schema with a fact less fact table to track patients in the hospital by diagnostic procedures and time

**Question.4** Differentiate between MOLAP AND ROLAP. Are there any similarities. If yes, then explain.

**Question.5** Explain them

- (a) Market basket analysis.
- (b) Snowflake Schema
- (c) Fact Constellation

**Question.6** Describe the star schema to track the quantities of a manufacturing company. Production quantities are normally analyzed along the business dimensions of product, time, parts used, production facility and production run. State Your Assumption

**Question.7 (a)** What are aggregate fact tables. Why they are needed.

(b) What are JUNK DIMENSIONS? Are they necessary for the data warehouse?