

## MANIPAL INSTITUTE OF TECHNOLOGY MANIPAL

A Constituent Institution of Manipal University

## VII SEMESTER B.TECH. (Computer Science and Engineering) END SEMESTER EXAMINATIONS, NOV/DEC 2016

SUBJECT: Business Intelligence and Its Applications [CSE437]

## REVISED CREDIT SYSTEM (23/11/2016)

Time: 3 Hours

MAX. MARKS: 50

## Instructions to Candidates:

- ✤ Answer ANY FIVE FULL questions.
- ✤ Missing data may be suitable assumed.
- 1A. 2M Explain Object Exchange Model with the help of an example. **1B.** With neat schematic list and briefly explain different OLAP operations. 4M **1C.** What constitutes supply chain analytics? Explain each of them. 4M **2A.** Distinguish Between a federated database and a data warehouse. 3M 4M **2B.** Describe different dimensions of data quality with examples 2C. 3M What are the differences between the top down approach and bottom up approach to building a data warehouse? **3A.** Give the William H. Inmon's definition of data warehouse. Explain each 3M key term in the definition. **3B.** What is data mart? How it is different from an Operational data source. 2M 3C. 5M Convert the ER model given in Fig 3C. into star Schema

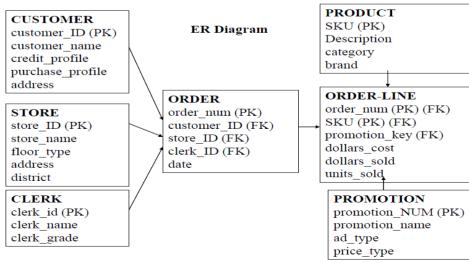


Fig. 3C.ER Diagram

4A. For the Star Schema given in Figure 4A. Identify different types of facts and dimensions. How do you tackle the different types of dimensions present in the given star schema? Write the queries for creating the cube for star schema given in Fig. 4A.

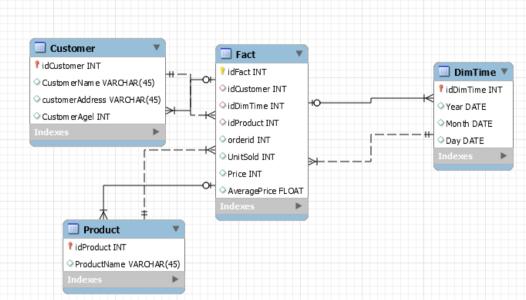


Fig 4A. Star Schema

1 is in it. Star Scholma	
Briefly explain schema integration and instance integration.	2M
Explain grain, hierarchy and fact less facts with example.	3M
Explain SMART test.	3M
List and explain common report layout types.	3M
With the help of an example explain balanced score card.	4M
What are different steps for creating dashboards?	2M
What are disadvantages of ActiveX script task?	3M
What is edit distance? How do you calculate it? Calculate the edit distance between following words.	5M
	<ul> <li>Briefly explain schema integration and instance integration.</li> <li>Explain grain, hierarchy and fact less facts with example.</li> <li>Explain SMART test.</li> <li>List and explain common report layout types.</li> <li>With the help of an example explain balanced score card.</li> <li>What are different steps for creating dashboards?</li> <li>What are disadvantages of ActiveX script task?</li> <li>What is edit distance? How do you calculate it? Calculate the edit</li> </ul>

- i. MIT and KMC
- ii. KC and TC

What additional parameters are used in fuzzy grouping to calculate the similarity between two words? What is an XML task with respect to SSIS?