MANIPAL INSTITUTE OF TECHNOLOGY
(Constituent Institute of Manipal University)
MANIPAL-576104

SEVENTH SEMESTER B.E..(CSE) DEGREE END SEMESTER EXAMINATION
DEC 2013
BUSINESS INTELLIGENCE AND ITS APPLICATIONS (CSE 437)
DATE: 02-12-2013

TIME: 3 HOURS   MAX.MARKS: 50

Instructions to Candidates
- Answer **any five** full questions.

1A. With Schematic explain UIMA architecture.
1B. What are the advantages and disadvantages of MOLAP?
1C. What is
    (i.) Drill-across. (ii.) Drill-through.
1D.What are the disadvantages of using Active-X script task in integration service package.   (3+4+1+2)

2A. Which are the terms used to measure the business value?
2B. Describe how data profiling is conducted.
2C. With examples explain different dimensions of data quality?   (2+4+4)

3A. List and explain different aspects of behavior analysis.
3B. Draw the ER model for the following: You have gotten a job planning databases for the European Union. Your first on job assignment is to help the various countries maintain information about their inhabitants.
• In each country, there are provinces, which contain towns. There cannot be two provinces with the same name in a single country. Similarly, there cannot be two towns with the same name in a single province. There is at least one province in each country and at least one town in each province.
• People live in towns. Men and women work in a town. Children learn in a school in a town.

• A person can be a man, a woman, or a child, and has a first-name, last-name, id, and birthday. Children are any people under the age of 18.
• A man can be married to a woman (polygamy is not allowed, i.e., one man can be married only to one woman). Although the Pope strongly disapproves, divorce, and subsequent remarriage, is possible.
• For each marriage, store the date of the marriage and information about who are the children of the married couple. You should assume that the parents of a child were married at the time of his birth.

3C. Explain conceptual data model. (4+4+2)

4A. Suppose that a data warehouse consists of the three dimensions **time, doctor, and patient**, and the two measures **count** and **charge**, where charge is the fee that a doctor charges a patient for a visit. Dimension time contains following entries time_key, day, day_of_week, month, quarter, year. Dimension doctor contains following entries doctor_id, doctor_name, phone#, address, sex. Dimension patient contains following entries patient_id, patient_name, phone#, sex, description, address.

  i. Draw the star schema for the above problem.
  ii. Starting with the base cuboid [**day, doctor, patient**], what specific OLAP operations should be performed in order to list the total fee collected by each doctor in 2004?

4B. Find the edit distance between Zeil and trials ((4+3)+3)

5A. Briefly explain different metric components.
5B. List and explain different perspective of balanced scorecard.
5C. How do you create dashboard?
5D. Define dashboard. (2+5+2+1)

6A. Name the tool used to perform SSIS operation.
6B. What are the visible components of designer window when working on a SSIS Project? Explain each of them.
6C. Differentiate between matrix report and tabular report.
6D. Explain Object Exchange Model with the help of an example (1+5+2+2)