Roll No. .....

67172

M.C.A. 4th Sem.
(with new notes - M.M. 80.)
Examination–May, 2016
Data Warehousing & Mining (New)

Paper-MCA-402

Time : 3 hours ***Max. Marks : 80***

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Question No. 1 is **compulsory**. Attempt **four** more questions selecting **one** question from each unit. All questions carry equal marks.

1. Answer the following questions briefly : [8×2=16]

(a) What is virtual data warehouse ?

(b) What is the need of multidimensional data model ?

(c) What is apex cuboid ? Give an example.

(d) What do you mean by partial and full materialization of cuboids ?

(e) What is knowledge Discovery ? List the steps of knowledge discovery process.

(f) What do you mean by concept hierarchy ? Give an example.

(g) What is association rule ? What are its types ?

(h) What is outlier analysis ? Discuss its significance.

Unit-I

2. What is data warehouse ? What are its applications ? Explain the various components of a data warehouse system with the help of a diagram. [16]

3. Compare the following concepts and also give example of each: [16]

(a) Snowflake schema and star schema

(b) Data cleaning and data transformation

(c) Enterprise warehouse, data mart and virtual warehouse.

Unit-II

4. (a) Explain following OLAP operations for multidimensional data with suitable examples: [8]

(i) Rollup

(ii) Drill down

(iii) Dice

(iv) Pivot

(b) Differentiate ROLAP, MOLAP and HOLAP servers. [8]

5. (a) What is data cube ? Explain with the help of an example. How many cuboids can be formed in n-dimnesional data cube ? [8]

(b) What are various methods of indexing of OLAP data ? Explain. [8]

Unit-III

6. (a) What is data reduction ? Why is it required ? Also discuss various strategies for data reduction. [8]