

(Please write your Exam. Roll No.)

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# END TERM EXAMINATION

FOURTH SEMESTER [MCA], MAY-2011

*Paper Code : MCA – 204*

*Subject : Data Warehousing and Data Mining*

*Paper ID : 44202*

*Time: 3 Hours*

*Maximum Marks : 60*

*Note : Part I is compulsory. Attempt one question from each other parts.*

## PART – I

(2×10=20)

**Q. 1.** Attempt any **TEN** questions. Each questions carry equal marks.

- (a) Define Data mining and Data warehousing.
- (b) Explain correlation analysis for handling redundancy.
- (c) When is data mart appropriate?
- (d) What do you mean by web enabled data warehouse?
- (e) Explain cross table reporting.
- (f) Explain data granularity in a data warehouse.
- (g) Distinguish between classification and clustering.
- (h) List out any two various commercial data mining tools.
- (i) Write the advantages of ROLAP and MOLAP.
- (j) Mention the various types of data available in data mining.
- (k) How Data mining is the primary step in the process of knowledge discovery?
- (l) Explain Data cleaning.

## PART – II

(2×5=10)

**Q. 2**

- (a) Describe five differences between operational system and informational systems.
- (b) Explain data granularity and how it is applicable to the data warehouse.

**OR**

**Q. 3**

- (a) What are the various data sources for the data warehouse?
- (b) What type of processing take place in a data warehouse? Explain.

**PART – III**

**(2x5=10)**

**Q. 4**

- (a) What is the STAR schema? What are the component tables?
- (b) For a manufacturing company, design a family of three STARS to support the value chain.

**OR**

**Q. 5**

- (a) Why is the entity-relationship modelling technique not suitable for the data warehouse? How is the dimensional modelling different?
- (b) Explain (i) Families of STARS (ii) Snowflake Schema.

**PART – IV**

**(2x5=10)**

**Q. 6**

- (a) What is Multidimensional Database? How do these store data?
- (b) Draw and explain Architecture of MOLAP.

**OR**

**Q. 7**

- (a) What is meant by Slice-and-dice? Explain with an example.
- (b) Compare and summarise the major distinguished features between OLTP and OLAP.

**PART – V**

**(2x5=10)**

**Q. 8**

- (a) How is data mining different from OLAP?? Explain.
- (b) What is clustering? How does it differ from classification? Explain with examples.

**OR**

**Q. 9**

- (a) Explain cluster detection technique.
- (b) What is spatial data mining? Explain with example.

