



**MCA DEGREE EXAMINATIONS: MAY 2015**

(Regulation 2009)

Fourth Semester

**MASTER OF COMPUTER APPLICATIONS**

MCA528: Data Warehousing and Data Mining

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 2 = 20 Marks)**

1. Define data mining.
2. What is evolution analysis?
3. What is the need for OLAP tools?
4. Differentiate between a data mart and a data warehouse.
5. What is data preprocessing?
6. What is the difference between classification & clustering?
7. State the characteristics of Apriori algorithm.
8. What is agglomerative clustering?
9. What is web mining?
10. What is the need for text mining?

**PART B (5 x 16 = 80 Marks)**

11. a) (i) Explain the steps involved in data mining process. (8)  
(ii) “Data Mining is an interdisciplinary field.” – Justify the statement. (8)
- (OR)
- b) (i) Explain the various techniques used in the data mining process. (8)  
(ii) Explain the steps in KDD process. (8)
12. a) (i) Explain the implementation of a data warehouse with a snowflake schema model. (8)  
(ii) Explain the architectural design of a data warehouse with a diagram. (8)

**(OR)**

- b) (i) Explain the components of a data warehouse with a diagram. (8)
- (ii) Write notes on ROLAP & MOLAP servers. (8)

13. a) Explain the various data preprocessing techniques with examples.

**(OR)**

b) Discuss the steps involved in FP algorithm with an example.

14. a) (i) Explain k-means cluster analysis with an example. (8)
- (ii) Discuss the different types of data that can be used for clustering with examples. (8)

**(OR)**

b) Explain decision tree classification algorithm with an example.

15. a) (i) Explain data mining process on spatial database. (8)
- (ii) Explain any two applications of data mining. (8)

**(OR)**

- b) (i) Explain the process of text mining in detail. (8)
- (ii) Discuss the social impacts of data mining. (8)

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