

**R13**

Code No: 814BD

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA IV Semester Examinations, December - 2019****DATA WAREHOUSING AND DATA MINING****Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

**PART - A****5 × 4 Marks = 20**

- 1.a) What is data preprocessing? What are the various forms of it. [4]
- b) Explain the architecture of data warehouse. [4]
- c) Distinguish between Apriori algorithm and Frequent pattern growth algorithm. [4]
- d) What are the steps involved in preparing the data for classification? [4]
- e) What are the advantages and disadvantages of k-means algorithm. [4]

**PART - B****5 × 8 Marks = 40**

- 2.a) Explain about the Integration of a Data mining system with a Database or Data warehouse system.
- b) List the techniques for Data cleaning. [4+4]

**OR**

- 3.a) What are the issues in Data mining?
- b) Explain about the classification of data mining systems. [4+4]

4. Explain in detail about the implementation of a data warehouse. [8]

**OR**

5. Illustrate OLAP operations in the Multidimensional Data Model. [8]

6. Discuss the FP-growth algorithm. Explain with an example. [8]

**OR**

7. Discuss about mining multilevel association rules from transaction databases in detail. [8]

8. Explain in detail about classification of Back propagation algorithm. [8]

**OR**

9. Explain linear regression and non-linear regression with example. [8]

10. Write algorithms for k-medoid clustering and Explain with simple data. [8]

**OR**

11. Explain about the Statistical-based outlier detection. [8]

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