LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – **COMPUTER SCIENCE**

FIRST SEMESTER – NOVEMBER 2016

CS 1822 - DATA MINING

Date: 02-11-2016   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

SECTION – A

Answer All the questions   **10 x 2 = 20**

1. Define Data mining.
2. Write down the steps involved in KDD process.
3. Define classification.
4. Write down the formula to measure Gini Index.
5. What is clustering?
6. Define outlier.
7. What is association rule?
8. Write down any two applications of association rule mining.
9. What are crawlers?
10. Define the term Disjoint.

SECTION – B

Answer All the questions   **5 x 8 = 40**

11. a) Explain decision trees with example.

    (OR)

    b) Discuss about the implementation issues in Data Mining.

12. a) Explain the ID3 algorithm with example.

    (OR)

    b) Discuss the issues in classification.

13. a) Explain the divisive analysis clustering algorithm.

    (OR)

    b) Explain the agglomerative clustering algorithm.

14. a) Explain quantitative association rules and the algorithm to find the same.

    (OR)

    b) How to measure the quality of rules? Explain.

15. a) Explain about spatial queries.

    (OR)

    b) Describe a suitable method to mine spatial data with an example.

SECTION – C

Answer All the questions   **2 x 20 = 40**

16. i) Describe the basic data mining tasks with categorization.   (10)
    ii) Explain the CART algorithm with example.   (10)
17. i) Explain in detail about the K –Nearest Neighbor algorithm for Classification.   (10)
    ii) Explain the K - Means clustering algorithm with example.   (10)
18. i) Explain the Apriori algorithm with example.   (10)
    ii) Explain in detail about web usage mining.   (10)

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