LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – **STATISTICS**

THIRD SEMESTER – NOVEMBER 2016

ST 3957 - DATA WAREHOUSING AND DATA MINING

Date: 09-11-2016   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

Part A

Answer all the questions   **10 X 2 = 20**

1. What is Staging Area in Data warehousing.
2. What is the role of data extraction in data warehousing?
3. Define independent Data Mart.
4. Define Data Cube.
5. What is physical data model in data warehousing?
6. What is Fact Table in data warehousing?
7. Define high data cardinality?
8. Why is partitioning important in data warehousing?
9. What is data mining?
10. Define ROC and AUC

Part B

Answer any five questions   **5 X 8 = 40**

11. Explain the following:

    a) Subject Oriented

    b) Integrated

    c) Time variant

    d) Non Volatile in data warehousing.

12. Distinguish between OLAP and OLTP databases.

13. Explain the role of OLAP operations in detail.

14. Explain in detail the horizontal partition.

15. What are the issues in Data mining?

16. What are pros and cons of Naïve Bayesian Classifier?

17. Discuss the procedure of Association rule classification.

18. Write a short note on Artificial neural network.

Part C

19. a) Explain three tier architecture system in data warehousing.   **(10)**

    b) What are steps are involved in Naïve Bayesian Classification.   **(10)**

20. a) Explain different types of schemas in data warehousing with illustrations.   **(15)**

    b) Discuss any two tyes of model validation in data mining.   **(05)**

21. a) Describe the procedures for Chi-square automated interaction detector.   **(10)**

    b) Explain the Kth Nearest Neighbourhood Method.   **(10)**

22. a) Explain the algorithm for Classification Tree.   **(10)**

    b) Discuss the steps involved in the construction Regression Tree.   **(10)**

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