 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **STATISTICS**

THIRD SEMESTER – **NOVEMBER 2012**

# ST 3955 - DATA WAREHOUSING AND DATA MINING

Date : 08/11/2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**SECTION A**

**Answer all the questions (2x10=20 Marks)**

1. Define ROC and AUC

2. State any two uses of a Decision tree

3. State the use of Kernel function in Support Vector Machine

4. State any two uses of a Gains chart

5. Explain any two application of text mining

6. What are the components of a middle tier in a three tier architecture?

7. How the connection is established between client tier and middle tier?

8. How the connection is established between middle tier and database tier?

9. What are the components of a decision support system?

10. What are the components of a database tier?

**SECTION B**

**Answer any FIVE questions (5x8=40 Marks)**

11. State the Applications of Data mining and the steps involved in a Data mining project

12. Explain the steps involved in construction of a Classification tree

13. Explain Bagging and Random Forest Method

14. Explain the steps involved in AdaBoost M1 algorithm for Boosting model performance

15. Explain Kth Nearest Neighbourhood Method of classification

16. Explain the functionalities of all the components of a web server

17. What are the steps involved in order to cash process

18. What are the steps involved in a procedure procure to pay process

**SECTION C**

**Answer any TWO questions (2x20=40 Marks)**

19. (i) Explain Naive Bayes Classification method and the steps involved in construction of CHAID

(ii)Explain the methods of model validation

20. (i) Explain Artificial Neural Network

(ii)Explain Support Vector Machine in detail

21.Explain the ETL process by explaining the different stages in data warehouse

22. Explain the sql\* loader process to transfer the data from the flat file to a table in a data base