LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – NOVEMBER 2014

ST 3957 - DATA WAREHOUSING AND DATA MINING

Date : 07/11/2014 Time : 09:00-12:00

PART A

Answer ALL the questions:

1. State any two applications of Data warehouse

Dept. No.

- 2. Define Data mining
- 3. Define Fact table and Dimension table
- 4. Define OLAP and OLTP
- 5. Define ROC and AUC
- 6. State any two uses of Gains chart
- 7. State the methods of model validation
- 8. Provide any two uses of Association rule mining
- 9. Define Text mining
- 10. Provide the use of Sentiment analysis

PART B

Answer any FIVE questions:

- 11. Explain ETL process in detail
- 12. Explain the three tire architecture and provide the advantage of three tire architecture over single tire and two tire architecture
- 13. Explain the real life applications of Data mining
- 14. Illustrate the method of obtaining association rules with an example
- 15. Explain Bagging and Random Forest Method
- 16. Discus the steps involved in CHAID method
- 17. Explain the steps involved in Naive Bayesian Classification method
- 18. Explain the steps involved in Adaptive Boosting method
- 19. Explain Genetic Algorithm with an example

PART C

Answer any TWO questions:

2x20=40

- 20. Explain Star Schema, Snow flake Schema and Fact constellation schema21. (i) Discuss the steps involved in construction of CART(ii) Discuss the steps involved in a Data mining project(8)22. (i) Explain SVM and its ability to handle non linear classification problem(10)(ii) Explain KNN in detail(10)23. (i) Illustrate Bayesian Network with an example
 - (ii) Explain the structure and the algorithm involved in ANN (10)



10x2=20

Max.: 100 Marks

5x8=40