# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc., B.C.A. DEGREE EXAMINATION - COMPUTER SCIENCE & APPLI.

### FIFTH SEMESTER – NOVEMBER 2014

**PART-A** 

CS 5405 / CA 5405 - DATA MINING

Date : 10/11/2014 Time : 09:00-12:00 Dept. No.

Max.: 100 Marks

10\*2=20

### **ANSWER ALL QUESTIONS:**

- 1. Write down the steps involved in KDD process.
- 2. Define Data warehouse.
- 3. What do you mean by Market Basket Analysis?
- 4. Define the term Iceberg queries.
- 5. What is Data prediction?
- 6. List out the classification methods.
- 7. Define Cluster analysis.
- 8. Expand the following terms: a) BIRCH b) OPTICS.
- 9. What are the tools used for detection of money laundering and other financial crimes?
- 10. What is webwide tracking?

#### PART-B

#### **ANSWER ALL QUESTIONS:**

11. a) Write a short note on Data cleaning.

(Or)

b) Explain and draw the architecture of a typical data mining system.

12. a) How to improve the efficiency of Apriori algorithm?

(Or)

- b) Explain the algorithm for finding frequent item sets using candidate generation.
- 13. a) Discuss the Decision tree induction with an algorithm.

#### (Or)

- b) Briefly explain the issues regarding Classification and Prediction.
- 14. a) Write a short note on Outlier analysis.

#### (Or)

- b) List down and explain any one of the major Clustering method.
- 15. a) Is Data mining a threat to privacy and Data security?

### (Or)

b) Discuss the significant trends in Data mining.

## PART-C

### **ANSWER ANY TWO QUESTIONS:**

- 16. a) Explain in detail about the different data repositories on which data mining can be performed.
- b) Discuss in detail about mining various kinds of Association rules.
- 17. a) Give detailed description of Bayesian Classification.

b) Enlist and explain the types of data in Cluster analysis.

- 18. a) Write an essay about the Applications of Data mining.
  - b) Illustrate the frequent item sets using an FP tree by pattern fragment growth.

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### 2\*20=40

5\*8=40