



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. & B.C.A. DEGREE EXAMINATION – COMPUTER SCIENCE & APPLICATIONS**

FIFTH SEMESTER – NOVEMBER 2016

**CS / CA 5405 - DATA MINING**

Date: 09-11-2016  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

**PART A**

Answer the questions.

(10x2=20)

1. Define Data characterization.
2. What is Data Cleaning?
3. What is market basket analysis?
4. What is a frequent itemset?
5. Define Prediction.
6. List out the different classification methods.
7. Define Cluster Analysis.
8. List out the major clustering methods.
9. Give examples of how data mining is used in the retail industry.
10. What are the features by which data mining systems are assessed?

**PART B**

Answer all the questions

(5x8=40)

11a. Explain the major functionalities of data mining systems.

(OR)

11b. Describe about Data Integration.

12a. Why are strong rules not always interesting? Explain with an example.

(OR)

12b. Discuss about constraint based association mining.

13a. Explain the Bayesian classification algorithm.

(OR)

13b. Discuss about classifier accuracy.

14a. Enumerate all hierarchical methods of partitioning and explain any one in detail.

(OR)

14b. What is Outlier analysis? List all the methods and explain any one in detail.

15a. Discuss in detail the applications of data mining in telecom industry.

(OR)

15b. Discuss the significant trends in Data mining.

## PART C

Answer any two questions

(2x20=40)

16a. Discuss the major issues in Data mining methodology and user interaction.

b. Discuss about mining various kinds of association rules.

17a. Give a detailed description of Back propagation method of classification.

b. Find the dissimilarity matrix for Categorical, Ordinal and Ration scaled variables from the following table.

<b>object identifier</b>	<b>test-1 (categorical)</b>	<b>test-2 (ordinal)</b>	<b>test-3 (ratio-scaled)</b>
1	code-A	excellent	445
2	code-B	fair	22
3	code-C	good	164
4	code-A	excellent	1,210

18a. Elaborate the social impacts of data mining.

b. Discuss the applications of data mining in the finance industry and explain how it is used in Intrusion Detection.

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