# CBCS-244

## B. Sc. (Hon's) (Third Semester) Examination, Dec. 2023

### (CBCS Course)

### COMPUTER SCIENCE

*Paper : 303-A*

**(Data Mining)**

*Time Allowed : Three hours*

*Maximum Marks : 60*

*Minimum Pass Marks : 21*

**Note :** Attempt questions of both sections as directed. Distribution of marks are given with sections.

### Section-'A'

**(Short Answer Type Questions)**          **5×6=30**

**Note:** Attempt all **five** questions. **One** question from each unit is compulsory. Each question carries 6 marks.

## Unit-I

1. Why machine learning is needed?

**Or**

What are the main/major issues related to data mining?

## Unit-II

2. Explain the advantages and disadvantages of association rule mining.

**Or**

Explain FP tree model with a suitable example.

## Unit-III

3. Explain the concept of supervised learning.

**Or**

Explain some supervised learning techniques.

## Unit-IV

4. Explain clustering of Numeric data.

**Or**

Write short note on consensus clustering.

## Unit-V

5. Throw light on the rough set theory and its application to data mining.

**Or**

Write a short note on trends in data mining.

## Section-'B'

**(Long Answer Type Questions)**     **3×10=30**

*Note: Attempt any three questions. Each question carries 10 marks.*

6. Define data. Differentiate between structured and unstructured data.

7. Explain association rule mining and its various variants with suitable examples.

8. How decision tree based classification is useful? List some disadvantages? How pruining is effective?

9. Explain k-mean clustering technique with suitable example.

10. Explain precision, recall Fa-measure and roc-curve with suitable example.