

UNIVERSITY OF MADRAS
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
SYLLABUS WITH EFFECT FROM 2020-2021

BCA-DSC19

CORE-XIX: DATA MINING

III YEAR / VI SEM

OBJECTIVES:

- To learn about data mining Concepts
- To study the different data mining techniques

OUTCOMES:

- To have knowledge in Data mining concepts
- To apply Data mining concepts in different fields

UNIT - I

Basic Data Mining Tasks – Data Mining Versus Knowledge Discovery in Data Bases – Data Mining Issues – Data Mining Matrices – Social Implications of Data Mining – Data Mining from Data Base Perspective.

UNIT - II

Data Mining Techniques – a Statistical Perspective on data mining – Similarity Measures – Decision Trees – Neural Networks – Genetic Algorithms.

UNIT - III

Classification: Introduction – Statistical – Based Algorithms – Distance Based Algorithms – Decision.

UNIT - IV

Clustering Tree – Based Algorithms – Neural Network Based Algorithms – Rule Based Algorithms – Combining Techniques: Introduction – Similarity and Distance Measures – Outliers – Hierarchical Algorithms. Partitioned Algorithms.

UNIT - V

Association Rules: Introduction - Large Item Sets – Basic Algorithms – Parallel & Distributed Algorithms – Comparing Approaches – Incremental Rules – Advanced Association Rules Techniques – Measuring the Quality of Rules.

TEXT BOOK:

1. Jiawei Han & Micheline Kamber, “*Data Mining Concepts & Techniques*”, 2011, 3rd Edition.

REFERENCE BOOK:

1. Margaret H.Dunbam, “*Data Mining Introductory and Advanced Topics*”, Pearson Education 2003.

WEB REFERENCES:

- NPTEL & MOOC courses titled Data Mining
- <https://nptel.ac.in/courses/106105174/>