

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BSCIT	Date	: 23/08/2026
Subject Code	: BSCIT-504	Time	: 11:30am to 01:45pm
Subject Name	: Data Warehousing and Data Mining	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Discuss various types of data, data mining functionalities and major issues of data mining.
2. Explain the characteristics, structure and advantages of Data Warehousing.
3. Explain OLAP. Discuss OLAP operations and compare OLAP and OLTP.
4. Explain Data Warehouse Architecture. Discuss metadata, data marts and information delivery system.
5. Explain Classification and Clustering in detail.

Section B

Answer the following (Attempt any four) (20)

1. Differentiate between Data Mining and Knowledge Discovery in Databases (KDD).
2. Explain Data Preprocessing and its importance in Data Mining.
3. Discuss Multidimensional Data Model with suitable examples.
4. Explain Association Rule Mining and the concepts of Support and Confidence.
5. Explain Web Mining and its applications.
6. Discuss Spatial Data Mining and Temporal Data Mining.

Section C

Part – A (Multiple Choice Questions) (10)

1. Data Mining is a process of:
A) Data Storage
B) Knowledge Discovery from Data
C) Data Transmission
D) Data Encryption
2. Which system stores analytical and historical data?
A) DBMS
B) OLTP
C) Data Warehouse
D) File System
3. OLAP stands for:
A) Online Analytical Processing
B) Online Application Processing
C) Object Level Analytical Processing
D) Online Access Processing
4. Which of the following is a data mining functionality?
A) Classification
B) Clustering
C) Association
D) All of the Above
5. Metadata is:
A) Data about Data
B) Temporary Data
C) Backup Data
D) Duplicate Data
6. Which measure indicates the frequency of occurrence of an itemset?
A) Confidence
B) Support
C) Accuracy
D) Precision

7. Classification is mainly used for:

- | | |
|-----------------------------|----------------------------|
| A) Grouping Similar Records | B) Predicting Class Labels |
| C) Data Compression | D) Data Backup |

8. Which technique groups similar objects together?

- | | |
|-------------------|---------------|
| A) Classification | B) Prediction |
| C) Clustering | D) Regression |

9. Web Mining is associated with:

- | | |
|--------------------|---------------------|
| A) Mining Web Data | B) Network Cabling |
| C) Database Backup | D) Software Testing |

10. Spatial Data Mining deals with:

- | | |
|---------------------------------------|-------------------|
| A) Geographic and Location-based Data | B) Financial Data |
| C) Text Data | D) Audio Data |

Part – B (State whether the following statements are true or false)

(10)

- 1 Data Mining is a part of the Knowledge Discovery Process.
- 2 Data Warehouse stores subject-oriented integrated data.
- 3 OLTP systems are mainly used for analytical processing.
- 4 Metadata means Backup data.-False
- 5 Data preprocessing improves data quality.
- 6 Support and Confidence are measures used in Association Rule Mining.
- 7 Classification is an unsupervised learning technique.
- 8 Regression groups similar data objects together.- False
- 9 Web Mining extracts useful information from web resources.
- 10 Spatial Data Mining analyzes text data.- False
