PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BBA DEGREE EXAMINATION DECEMBER 2025
(Fourth Semester)

Branch – BUSINESS ADMINISTRATION

DATAMINING AND BUSINESS INTELLIGENCE

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions

ALL questions carry EQUAL marks   (10 × 1 = 10)

1. What is the primary purpose of data mining?
   A) To clean the data
   B) To analyze large datasets to extract useful patterns
   C) To generate reports for management
   D) To store data in databases

2. What is a data warehouse primarily used for?
   A) Data cleaning
   B) Storing transaction data
   C) Storing historical data for analysis
   D) Data transformation

3. Which of the following is a method of data pre-processing?
   A) Data mining
   B) Data cleaning
   C) Data analysis
   D) Data visualization

4. Which of the following is part of data pre-processing?
   A) Data mining
   B) Data cleaning
   C) Data visualization
   D) Data modelling

5. What is an association rule in data mining?
   A) A rule to classify data into categories
   B) A rule that helps in clustering data
   C) A rule that identifies relationships between different data items
   D) A rule that cleans data

6. What is the primary purpose of mining association rules in databases?
   A) To find patterns in transactional data
   B) To store data in multidimensional form
   C) To clean noisy data
   D) To transform data into a usable format

7. What is Business Intelligence primarily used for?
   A) Creating websites
   B) Managing databases
   C) Analyzing business data to support decision-making
   D) Storing financial data

8. What does Business Intelligence (BI) primarily help organizations do?
   A) Increase data storage capacity
   B) Analyze and make decisions based on data
   C) Clean up large data sets
   D) Secure data transactions

9. Which is a key aspect of Business Intelligence (BI) implementation?
   A) Writing complex code
   B) Connecting BI systems to databases
   C) Organizing workshops
   D) Developing mobile applications

10. What is the first step in implementing a Business Intelligence (BI) system?
    A) Data cleaning
    B) Database integration
    C) Identifying business requirements
    D) Generating reports

SECTION - B (35 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 × 7 = 35)

11 A). Explain the different functionalities of data mining with suitable examples.
(OR)
   B). Describe the architecture of a data warehouse and explain its key components.

12 A). Explain how data cleaning handles missing values, noisy data, and inconsistencies with an example.
(OR)
   B). Describe data transformation in integration with an example of normalization or aggregation.

13 A). How single-dimensional Boolean association rules are mined using the Apriori algorithm?
(OR)
   B). How are multidimensional association rules mined from relational databases and data warehouses?

14 A). How do Transaction Processing and Analytic Processing differ in BI? Provide examples.
(OR)
   B). What is BI Governance, and what challenges does it face? Give examples.

15 A). Explain the tools and techniques used for BI implementation and integration with enterprise systems.
(OR)
   B). What challenges occur when connecting B1 systems to databases, and how can they be resolved?

SECTION -C (30 Marks)
Answer **ANY THREE** questions
ALL questions carry **EQUAL** Marks   (3 × 10 = 30)

16. Analyze the major issues in data mining and their impact on its functionalities, with examples.

17. How do data cleaning, integration, transformation, reduction, and discretization improve data mining outcomes?

18. Explain the challenges and techniques in mining multidimensional association rules with examples.

19. How does Business Intelligence (BI) support changing business environments and enable intelligence creation and governance?

20. Evaluate tools for successful B1 implementation and integration.

Z-Z-Z   END