

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION MAY 2022
(Sixth Semester)

Branch – COMMERCE (BUSINESS ANALYTICS)

DATA MINING AND BUSINESS INTELLIGENCE

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

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

- 1 _____ in a data warehouse is similar to the data dictionary or the data catalog in a database management system.
(i) Metadata (ii) Schema
(iii) Data mart (iv) database
- 2 The _____ component shown on the right consists of all the different ways of making the information from the data warehouse available to the users.
(i) Information Delivery (ii) Data Staging
(iii) Data Storage (iv) Source Data
- 3 Data warehouse architecture is based on _____.
(i) DBMS (ii) RDBMS. (iii) Sybase. (iv) SQL Server.
- 4 The operation of moving from finer-granularity data to a coarser granularity (by means of aggregation) is called a _____.
(i) Rollup (ii) Drill down (iii) Dicing (iv) Pivoting
- 5 Which of the following is an essential process in which the intelligent methods are applied to extract data patterns?
(i) Warehousing (ii) Data Mining
(iii) Text Mining (iv) Data Selection
- 6 The initial steps concerned in the process of knowledge discovery is:
(i) Data Selection (ii) Data Integration
(iii) Data Cleaning (iv) Data Transformation
- 7 Frequency of occurrence of an itemset is called as
(i) Support (ii) Confidence
(iii) Support Count (iv) Rules
- 8 What techniques can be used to improve the efficiency of apriori algorithm?
(i) Hash-based techniques (ii) Transaction Increases
(iii) Sampling (iv) Cleaning
- 9 Which of the following areas are affected by BI?
(i) Revenue (ii) CRM (iii) Sales (iv) CPM
- 10 _____ phase of the data analytics lifecycle usually takes the longest time.
(i) Phase 2: Data Preparation (ii) Phase 3: Model Planning
(iii) Phase 4: Model Building (iv) Phase 5: Communicate Results

Cont...

SECTION - B (35 Marks)Answer **ALL** Questions**ALL** Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Discuss about the life cycle of data business intelligence.
OR
b Clarify the advantages and disadvantages of Top-Down Versus Bottom-Up Approach.
- 12 a Compare the difference between ROLAP and MOLAP.
OR
b Write a Statement about on OLAP and its characteristics.
- 13 a Discuss the major issues in data mining
OR
b Narrate the strategies involved in Data reduction process.
- 14 a Clarify about the concept of concept description.
OR
b Illustrate about Data Generalization and summarization based characterization.
- 15 a Clarify the few major applications of data mining in the business area.
OR
b Determine the key role for successful data analytical project.

SECTION - C (30 Marks)Answer any **THREE** Questions**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Determine the significant trends in data warehousing.
- 17 Explain in detailed about data warehouse architecture with neat diagram.
- 18 Outline about the various task performed by data mining.
- 19 Explain in detailed about the problem definition and important concepts of Association Rule mining.
- 20 Elucidate the data mining application used in Telecommunication Industry.

Z-Z-Z

END