

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**BCA DEGREE EXAMINATION MAY 2022  
(Fourth Semester)**

Branch – **COMPUTER APPLICATIONS**

**DATA WAREHOUSING AND MINING**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer **ALL** questions

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

- 1 The Data Warehouse is \_\_\_\_\_.  
 (i) read only (ii) write only  
 (iii) read write only (iv) none
- 2 The \_\_\_\_\_ error is examined for a specific prediction to measure the accuracy.  
 (i) Squared (ii) sequential  
 (iii) random (iv) partition
- 3 The important aspect of the data warehouse environment is that data found within the Data warehouse is \_\_\_\_\_.  
 (i) subject - oriented (ii) time variant  
 (iii) integrated (iv) all of the above
- 4 The time horizon in Data warehouse is usually \_\_\_\_\_.  
 (i) 1-2 years (ii) 3-4 years  
 (iii) 5-6 years (iv) 5-10 years
- 5 The data is stored, retrieved & updated in \_\_\_\_\_.  
 (i) OLAP (ii) OLTP  
 (iii) SMIP (iv) FIP
- 6 The \_\_\_\_\_ describe the data contained in the data warehouse.  
 (i) Relational data (ii) Operational data  
 (iii) Metadata (iv) Informational data
- 7 The \_\_\_\_\_ predicts future trends & behaviour, allowing business managers to make proactive, knowledge-driven decisions.  
 (i) Data warehouse (ii) Data mining  
 (iii) Data marts (iv) Metadata
- 8 The \_\_\_\_\_ is the heart of the warehouse.  
 (i) Data mining database servers (ii) Data warehouse database servers  
 (iii) Data mart database servers (iv) Relational database servers
- 9 What are closed itemsets?  
 (i) An itemset for which at least one proper super-itemset has same support  
 (ii) An itemset whose no proper super-itemset has same support  
 (iii) An itemset for which at least super-itemset has same confidence  
 (iv) An itemsetwhose no proper super-itemset has same confidence
- 10 The \_\_\_\_\_ mining performed by extracting the useful information from the website.  
 (i) web usage mining (ii) web content mining  
 (iii) web text mining (iv) all the above

Cont...

**SECTION - B (25 Marks)**

Answer **ALL** questions  
**ALL** questions carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Explain the OLAP operations with example.  
OR  
b Draw the data warehousing architecture with examples.
- 12 a Define KDD and explain the concepts.  
OR  
b Explain the need for preprocessing the data.
- 13 a Explain the various data mining functionalities with examples.  
OR  
b Discuss about constraint based association mining.
- 14 a Analyse the statistical perspective of data mining with example.  
OR  
b How can you evaluate the Neural Networks techniques in data mining? Explain.
- 15 a List out the categories of web mining. Explain any two.  
OR  
b Explain the incremental rules in association mining.

**SECTION -C (40 Marks)**

Answer **ALL** questions  
**ALL** questions carry **EQUAL** Marks (5 x 8 = 40)

- 16 a Explain the various schemas of multidimensional databases.  
OR  
b Explain in detail about KDD process.
- 17 a Explain in detail about FP algorithms with examples.  
OR  
b Discuss the concept of various methods used to solve the classification problem?
- 18 a Analyse the various issues of data mining.  
OR  
b Explain the data mining metrics with example.
- 19 a Explain in detail about decision tree algorithm with examples.  
OR  
b Explain the genetic algorithms with example.
- 20 a Summarise the concept of distributed algorithms with examples.  
OR  
b Examine the spatial clustering algorithm used in data mining.

Z-Z-Z

END