



**MAN-003-003621** Seat No. \_\_\_\_\_

**B. C. A. (Sem. VI) (CBCS) Examination**

**March / April - 2018**

**CS-32 : Data Warehousing & Data Mining**

**Faculty Code : 003**

**Subject Code : 003621**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

**1 Answer the following questions : 20**

- (1) Data can be updated in \_\_\_\_\_ environment.
- (2) The star schema is composed of \_\_\_\_\_ fact table.
- (3) \_\_\_\_\_ describes the data contained in the data warehouse.
- (4) The core of the multidimensional model is the \_\_\_\_\_ which consists of large sets of facts and a number of dimensions.
- (5) Classification is an unsupervised learning. (True / False)
- (6) WEKA stands for \_\_\_\_\_
- (7) The dimension tables describes the \_\_\_\_\_
- (8) Which type of data generally data Mart can contain ?
- (9) OLAP stands for \_\_\_\_\_
- (10) Which algorithm is a collection of nodes (neurons) and edges ?
- (11) GA stands for \_\_\_\_\_
- (12) Which method maps data into the predefined groups ?
- (13) The human brain consists of a network of \_\_\_\_\_
- (14) Which is the well known association rule algorithm and is used in the most commercial products?
- (15) Which clustering method is used for iterative clustering?
- (16) MFCS stands for \_\_\_\_\_

- (17) Prediction can be viewed as forecasting a \_\_\_\_\_ value.
- (18) Data warehouse contains \_\_\_\_\_ data that is never found in the operational environment.
- (19) Which clustering patterns/ techniques start with all records in one cluster and then try to split that cluster into small pieces ?
- (20) Converting data from different sources into the common format for processing is called as \_\_\_\_\_

- 2 (A) Attempt any **three** : **6**
- (1) Write a note on DSS system.
  - (2) Differentiate: Fact table v/s Dimension table.
  - (3) Differentiate: informational system v/s operational system.
  - (4) Explain Bayes theorem.
  - (5) Write a note on Granularity.
  - (6) Explain point estimation method.
- (B) Attempt any **three** : **9**
- (1) Differentiate: star schema v/s snowflake schema.
  - (2) Write a note on Data Mart.
  - (3) What is K-Means algorithm? Explain.
  - (4) What is Data Warehouse? Explain its characteristics.
  - (5) What is ETL? Why we use it?
  - (6) Write a note on partitioning of data.
- (C) Attempt any **two** : **10**
- (1) Explain data warehouse architecture in detail.
  - (2) What is OLAP? Explain its various types.
  - (3) Differentiate: OLTP v/s OLAP.
  - (4) Write comparison and contradiction of any two ETL tools.
  - (5) What is Data Mining? Explain its various techniques.

- 3** (A) Attempt any **three** : **6**
- (1) List out various application areas of data mining.
  - (2) Write a note on association rule.
  - (3) Explain Nearest neighbor algorithm.
  - (4) What is Weka? Explain its various features.
  - (5) Write a note on Machine learning technique.
  - (6) List out various methods of association rule algorithm.
- (B) Attempt any **three** : **9**
- (1) Differentiate: Data Warehouse v/s Data Mart.
  - (2) What is Genetic algorithm? Explain any two.
  - (3) What is clustering? What is the use of it? Explain.
  - (4) What is KDD? Explain.
  - (5) What is statistics? Explain its usage in data mining.
  - (6) Explain the term: agglomerative clustering, divisive clustering.
- (C) Attempt any **two** : **10**
- (1) Explain Apriori algorithm in detail.
  - (2) What is the role of data mining in government field? Explain.
  - (3) What is Neural Network? Explain in detail.
  - (4) Write a note on different data mining processes in detail.
  - (5) Write a step to develop the decision tree in Weka.
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