



NAN-003-003621 Seat No. _____

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

March / April - 2017

CS - 32 : Data Warehousing & Data Mining

Faculty Code : 003

Subject Code : 003621

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

[Total Marks : 70

- 1 Attempt the followings : 20
- (1) Define Data Mining.
 - (2) Write down equations of Bias and MSE.
 - (3) What is Clustering?
 - (4) Which diagram is used to illustrate the hierarchical clustering technique ?
 - (5) What is surrogate key?
 - (6) List three types of Agglomerative algorithm.
 - (7) Give the name of first tier in three tiered DWH architecture.
 - (8) Define Confidence and write down its equation.
 - (9) ETL stands for _____
 - (10) _____ is the last phase of CRISP Data Mining cycle.
 - (11) Which component of DWH architecture shows analysis in graphical format for taking decision?
 - (12) Dimension table normally includes _____ data.
 - (13) Write down an equation of Bayes Theorem.
 - (14) What is nearest neighbor algorithm?
 - (15) HOLAP stands for _____
 - (16) Which are two types of hierarchical clustering?
 - (17) What is WEKA?
 - (18) ARFF stands for _____
 - (19) What is Support in association rule'?
 - (20) Which hierarchical clustering is opposite process of Divisive clustering?

- 2 (a) Attempt the following : (any **three**) 6
- (1) Explain last phase of Data Mining process.
 - (2) Explain Data Granularity.
 - (3) Explain security in Data Mart.
 - (4) What is Data warehouse? List its characteristics.
 - (5) List advantages of ROLAP.
 - (6) Explain Point Estimation.
- (b) Attempt the following : (any **three**) 9
- (1) Differentiate : Operational System and Informational System
 - (2) Differentiate : Fact Data and Dimension Data
 - (3) Differentiate : OLAP and OLTP
 - (4) Differentiate : Data Mart and Data Warehouse
 - (5) Differentiate : ROLAP and MOLAP
 - (6) Differentiate : Two tiered and Three tiered DWH architecture
- (c) Attempt the following : (any **two**) 10
- (1) Explain any two architectural components of Data Warehouse.
 - (2) Explain the usage of association in Market Basket Analysis.
 - (3) Write a note on Binary Decision Tree with suitable example.
 - (4) Describe Star schema Data Mart.
 - (5) Explain Clustering with its classification.
- 3 (a) Attempt the following : (any **three**) 6
- (1) Explain Data cleansing in ETL.
 - (2) What is FP-tree growth algorithm?
 - (3) List advantages of MOLAP.
 - (4) Explain KDD.
 - (5) What is detailed data in data warehouse?
 - (6) List out application area of Neural Network.

- (b) Attempt the following : (any **three**) **9**
- (1) Explain Pincer Search Algorithm.
 - (2) Write a note on sampling algorithm.
 - (3) Explain Divisive Clustering.
 - (4) Explain Association Rules.
 - (5) Draw classification of Data Mining and list the techniques.
 - (6) Explain any one type of OLAP.
- (c) Attempt the following : (any **two**) **10**
- (1) Write a note on Neural Networks.
 - (2) Explain Basic steps to develop data warehouse architecture.
 - (3) Explain Apriori algorithm with example.
 - (4) Explain steps for data mining process.
 - (5) Explain Bayes Theorem and Hypothesis Testing.
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