

Third Year B.C.A (Semester - II) Examination
Paper - 15BCA312

Elective :-
Data Mining

Time : Three hours]

[Full Marks - 60

- N.B. :**
- i) All questions carry equal marks
 - ii) Due credit will be given to neatness & adequate dimensions.
 - iii) Assume suitable data wherever necessary.
 - iv) Illustrate your answer necessary with the help of neat sketches.
 - v) Use Blue/Black ink/refill only for writing the answer book.

Q.1 Fill in the blanks and rewrite the following statements. 5

- a) The output of KDD is ____
 - i) Data
 - ii) Information
 - iii) Useful information
 - iv) Query
- b) Missing values, Noise and outliers and duplicate data are problem of ____
 - i) Processing Data
 - ii) Mapping Data
 - iii) Evaluating Data
 - iv) Data Quality
- c) Association rules a real ways define on ____
 - i) Binary Attributes
 - ii) Single Attributes
 - iii) Multidimensional Attributes
 - iv) None of these
- d) Classification rules are extracted from ____
 - i) Root Node
 - ii) Decision Tree
 - iii) Siblings
 - iv) Branches

- e) _____ is the not a type of clustering.
 i) Splitting ii) K-means
 ii) Hierarchical iv) Partitional

- Q.2 a) Explain architecture of Data Mining with neat diagram. 6
 b) Describe the classification of data mining system. 5

OR

- Q.3 a) Discuss various steps of Knowledge discovery from database. 5
 b) Mention the advantages and disadvantages of data mining. 6

- Q.4 a) What is Data Transformation? Explain various methods of data transformation. 6
 b) What is Data Cleaning? Describe different ways of handling missing values. 5

OR

- Q.5 a) Explain the concept of Hierarchy Generation. 6
 b) Define data reduction and data cube aggregation. 5
- Q.6 a) Explain the basic concept of mining frequent pattern. 5
 b) Explain various Association rules for data mining. 6

OR

- Q.7 a) Explain the Aprior Algorithm for finding the Frequent Itemsets. 5
 b) Explain the process of constraint based association mining. 6

- Q.8 a) What is Linear and Non Linear Regression explain. 6
 b) List out some of the issues regarding clustering and prediction. 5

OR

- Q.9 a) Explain Bayesian classification. 5
 b) Explain IF- THEN Rules in classification with example. 6

- Q.10 a) What is Cluster Analysis? What are the typical requirements for the clustering in data mining? 6
 b) Explain Key issues in Hierarchical clustering methods. 5

OR

- Q.11 a) Explain K-Means partitioning method with example. 5
 b) Explain the following Hierarchical methods of cluster analysis. 6
 i) Agglomerative ii) Divisive
