

Bachelor of Science (Information Technology) (I.T.) Semester—VI Examination
DATA MINING
Paper—4

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) All questions are compulsory and carry equal marks.
(2) Draw neat and labelled diagram wherever necessary.

EITHER

1. (a) What are the different problems associated with data mining ? Discuss any two of them. 5
(b) Explain association rule mining in detail. 5

OR

- (c) List the different application areas where data mining is used. Explain any one application in any area. 5
(d) Explain Frequent Itemset Mining (FIM) algorithm. 5

EITHER

2. (a) What principles are considered while constructing decision tree ? Explain. 5
(b) Explain in detail optimal classification Algorithm. 5

OR

- (c) Write algorithm for decision tree construction. 5
(d) What do you mean by optimal classification ? Explain. 5

EITHER

3. (a) How clustering is based on grid ? Explain any one method of clustering base on grid. 5
(b) Explain in brief for clustering :
(i) Hierarchical method
(ii) Position method. 5

OR

- (c) What base is used for evaluating the clustering ? Explain in brief. 5
(d) Define clustering. What type of applications are considered in clustering ? Explain. 5

EITHER

4. (a) Explain following types of data and one method used for mining the data :
(i) Relational Data
(ii) Transactional Data. 5
(b) What method is used to mine multidimensional data ? Explain any one. 5

OR

- (c) What do you mean by partition ? Explain it with example. 5
(d) Explain any one method used for mining distributed data. 5
5. Attempt **ALL** :—
(a) Differentiate between KDD and Data Mining. 2½
(b) Explain splitting Indices with example. 2½
(c) What is Outlier ? Explain. 2½
(d) Explain partition discovery. 2½