

2018
MCA
MCA-5.3
DATA MINING AND WAREHOUSING

Full Marks : 75

Time : 3 hour

The figures in the margin indicates full marks for the questions

1. (a) What is data mining? 2
 (b) What is the difference between KDD and datamining? Explain in detail about KDD process. 2+6

2. (a) Describe candidate generation and pruning process of a priori algorithm with proper example. 6
 (b) Write down the apriori algorithm. 6

3. Explain the algorithm for mining frequent item sets without candidate generation for the b given set (min-sup = 30%). 10

| TID | Items brought |
|-----|-----------------|
| 100 | a,c,d,f,g,i,m,p |
| 200 | a,b,c,f,l,m,o |
| 300 | b,f,h,j,o,w |
| 400 | b,c,k,s,p |
| 500 | a,f,c,e,l,p,m,n |
| 600 | c,d,h,j,o,w |

4. Write down the PAM algorithm. What is the advantage of CLARANS over PAM? 6+4=10

5. (a) Define data warehouse. State general stages involved in data warehouse. 2+4=6
(b) What is OLAP? Describe four basic OLAP operations. 2+6=8

6. Give brief description about meta data. 10

Or

What do you mean by data cube in multidimensional data model?
Describe the different schemas for multidimensional databases in data warehouse? 2+8=10

7. Describe about requirements of clustering analysis in data mining. 9
