

M. Tech II Semester Regular Examinations, September 2015**DATA MINING AND DATAWAREHOUSING****(Computer Science & Engineering)****Time : 3 Hours****Max. Marks : 60****Note: Answer Any Five Questions. All Questions carry equal marks.**

1. a) What is meant by preprocessing and what are the preprocessing Techniques? (6M)
b) What are the various data mining task primitives and explain? (6M)
2. a) Explain data transformation. (6M)
b) List out OLAP operations and explain with an example. (6M)
3. a) Describe about measuring the central tendency. (6M)
b) Describe in detail about concept hierarchies. (6M)
4. a) What is the criteria for evaluating the performance of the classifier and explain. (6M)
b) Explain Naïve Bayes classifier with an example. (6M)
5. a) How does tree pruning work? What are the some enhancements to basic decision tree induction? (6M)
b) What are the things suffering the performance of Apriori candidate generation technique? (6M)
6. A database has four transactions. Let min_sup=60% and min_conf =80% (12M)

TID	Date	Items_bought
T100	10/15/99	{K, A, D, B}
T200	10/15/99	{D, A, C, E, B}
T300	10/19/99	{C, A, B, E}
T400	10/22/99	{B, A, D}

Find all frequent item sets using Apriori and FP-growth, respectively. Compare the efficiency of the two mining processes.

7. a) Explain FP Growth algorithm with example. (6M)
b) What are the requirements for cluster analysis? Explain briefly. (6M)
8. a) What are the strengths and weaknesses of K-Means clustering algorithm? (6M)
b) Explain DBSCAN clustering algorithm. (6M)
