



**Date Warehousing & Mining
(New) (1290)**

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any two** sub questions from each question.
5. Assume suitable data.

1. a) What is concept hierarchy ? State how it is useful in datamining ? **10**
b) Compare following datamining functionalities. **10**
 - i) Discrimination and classification.
 - ii) Characterization and clustering.
- c) What is the need of constructing dataware house ? **10**
2. a) Explain the methods of concept hierarchy generation for numerical data. **10**
b) Explain following methods of dimensionality reduction. **10**
 - i) Principal component analysis.
 - ii) Histograms.
- c) Explain various data mining primitives ? **10**
3. a) Write an algorithm for attribute oriented induction ? **10**
b) Describe the statistical measures to measure dispersion of data. **10**
c) State the methods of mining multilevel association rules. **10**

4. a) Differentiate between classification and prediction also explain the steps of classification process. 10
- b) Explain following. 10
- i) Rule extraction from a decision tree.
- ii) Rule based classifier.
- c) Describe multilayer feed forward neural network. 10
5. a) Describe various types of data in cluster analysis. 10
- b) Discuss various typical requirements of clustering in data mining. 10
- c) Write short note on following. 10
- i) Web mining.
- ii) Text mining.
