# FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

## SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

## DEPARTMENT OF INFORMATION AND MEDIA TECHNOLOGY

First Semester B.Tech Examinations 2012/2013 ACADEMIC SESSION

Curse Title: Data Mining II                              Credit Units: 2

Course Code: IMT412                                      Time Allowed: 2 hours

Instruction: Answer any **FOUR** questions            April 2013

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1. a) What does Association analysis entails? (10 marks).

   b) What are the basic metrics of an association rule? (5 marks)

2. a) What is Classification? Explain Predictive and Descriptive modelling. (10 marks).

   b) Sketch a lattice for all possible itemsets, $I=\{a,b,c,d,e\}$. (5 marks).

3. a) Discuss a Decision Tree induction. What are the purity metrics for the best split selection? (10 marks)

   b) What are the pitfalls to avoid in a Decision tree induction? (5 marks).

4.    a) Discuss web data mining activities in any TWO major industries. (10 marks).

      b) Highlight the potential security concerns associated with the use of web mining in the industries as discussed in (a) above. (5 marks).

5.    a) What is Web data mining? List the four disciplines that contribute to web data mining evolution. (10 marks).

      b) Itemize the major tasks in Web data mining? (5 marks).