554011
M.Sc. FOURTH SEMESTER EXAMINATION
APRIL – MAY 2015
SUBJECT: COMPUTER SCIENCE
PAPER – I
DATA MINING

Time: 3hrs   Max. Marks: 40
                                                              Min. Marks: 16

Note: All sections are compulsory. Marks are indicated against each
        section.

SECTION – A
Objective Type Questions

Q.1   Choose the correct answer: (1 x 5 = 5)

  (i) Which of the following is not a data mining functionality?
        (a) Characterization and Discrimination
        (b) Classification and Regression
        (c) Selection and Interpretation
        (d) Clustering and Analysis

  (ii) Data transformation includes from a detailed level to a
       summary level-
        (a) A process to change data from a detailed level to a
            summary level
        (b) A process to change data from a summary level to a
            detailed level
        (c) Joining data from one source into various sources of
            data.
        (d) None of above

  (iii) The basic algorithm for decision tree induction is a …..
       algorithm.
        (a) Step – by - step   (b) Procedural
        (c) Greedy   (d) None of these

                                                              P.T.O.

(iv) Which of the following is the collection of data objects that are similar to one another within the same group?
    (a) Partitioning   (b) Cluster
    (c) Table   (d) Data source

(v) We can mine ……….
    (a) Spatial databases   (b) Multidimensional databases
    (c) Text databases   (d) All of the above

SECTION – B
Short Answer Type Questions
(2 x 5 = 10)

Q.2. Discuss about major issues in Data Mining.

OR

Explain architecture of a Data Warehouse.

Q.3. What is the need of preprocessing the data?

OR

Explain process of data cleaning in detail.

Q.4. Define Prediction. What are the issues regarding Predictions?

OR

How Association rule mining is important in Data Mining?

Q.5. Give introduction of partitioning methods.

OR

How Outlier analysis is used in Fraud detection?

Q.6. What are spatial Databases?

OR

Write short notes on Mining Time series and sequence data.

SECTION – C
Long Answer Type Questions
(5 x 5 = 25)

Q.7. Define Data Mining. What are different data mining functionalities?

OR

What is Data Cube? Explain Multidimensional Data Model.

Q.8. Explain discretization and concept Hierarchy Generation in brief.

OR

What do you know about Data Integration and Transformation? Explain any one method of Data Transformation.

Q.9. Explain classification by decision Tree Induction.

OR

Write down the steps of classification by back Propagation.

Q.10. What is Cluster analysis? Explain density based Cluster method.

OR

Explain Grid Based Clustering method.

Q.11. How mining is performed on Multimedia Databases? Explain in detail.

OR

Explain Mining the World Wide Web.

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