

Printed Pages: 3

THE REAL PROPERTY.

TCS31

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID: 0105 Roll No.

B. Tech

(SEM VII) ODD SEMESTER THEORY EXAMINATION 2009-10 DATA MINING & DATA WAREHOUSING

Time: 3 Hours]

[Total Marks: 100

Note: Attempt all questions.

1 Attempt any four parts:

 $5 \times 4 = 20$

- (a) Explain the data mining process with neat diagram.
- (b) What do you mean by data cleaning?
- (c) Explain clustering and regression with example.
- (d) What is Z-score normalization?
- (e) Distinguish between dimensionality reduction and numerasity reduction.
- (f) Explain Histogram. The following data are a list of prices of commonly sold items at a company. The number have been sorted 1, 1, 5, 5, 5, 8, 8, 10, 10, 15, 15, 15, 20, 20, 20, 20 Make a histogram for price using singleton buckets.

- What do you understand by the terms (a) data characterization in content to concept description?
- With the help of suitable example, explain data (b) discrimination in brief.
- List out the reasons, why we perform athibute (c) relevance analysis?
- What are the main purposes of statistics, used (d) in data mining?
- What do you understand by outliers? (e)
- What do you mean by association rules, for (f) what purposes it is being used? Explain with example.

Answer any two parts: 3

 $10 \times 2 = 20$

5

- What are the different classification techniques? Discuss issuess regarding classification and prediction.
- (b) What do you mean by neural network ? Explain multilayer Feed-Forward neural network Differentiate between Feed-Forward and Feedback system.
- (c) What do you mean by decision tree? Describe ID3 algorithm of the decision tree. Why it is unsuitable for data mining applications?

- Define the data warehousing with suitable example, why we need a separate data warehouse? Differentiate between OLAP and OLTP
- What is a multidimensional data model? How we convert tables and spreadsheets to Data cubes? Convert 2-D tables into 3-D data cubes.
- (c) Explain Snow-Flake schema with an (i) example.
 - (ii) Explain fact constellation with an example.

Attempt any two parts:

 $10 \times 2 - 20$

- Explain OLAP functions and tools in brief. What are the main features of OLAP servers?
- What do you mean by aggregation? Explain in brief, how the OLAP handles aggregation? Write the differences between MOLAP and HOLAP.
- Write short notes on:
 - Slice and Dice operations
 - Testing of data warehouses.