

BT-8/JX**9509****Data Warehousing and Data Mining****Paper : CSE-476**

Time : Three Hours]

[Maximum Marks : 75

Note :- Attempt **FIVE** questions, selecting at least **ONE** question from each Unit.

UNIT-I

1. (a) What is data mining ? Explain through a block diagram.
(b) What are different applications of data mining ? 7,8
2. (a) Write data smoothing techniques.
(b) Write one important feature and a real life example of the following types of data :
spatial data, text data, multimedia data, and stream data. 7,8

UNIT-II

3. Describe and compare the following :
(a) OLTP and OLAP
(b) Star and snowflake schemas. 7,8
4. Explain the following :
(a) Distributed data warehouse
(b) Virtual data warehouse. 7,8

UNIT-III

5. In context of data warehouse define meta data, operational data, and operational database. 5,5,5
6. Write a short note on 2-tier, 3-tier, and 4-tier data warehouse architectures. 15

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Contd.

UNIT-IV

7. (a) What is difference between classification and clustering ?
(b) Write a short note on neural networks. 15
8. Suppose that the data for analysis includes the attribute age. The age values for the data tuples are (in increasing order) 13, 15, 16, 16, 19, 20, 20, 21, 22, 22, 25, 25, 25, 25, 30, 33, 33, 35, 35, 35, 35, 36, 40, 45, 46, 52, 70
- (i) What are the mean, median, and mode of the data ?
(ii) Comment on the data's modality.
(iii) Give the five-number summary of the data.
(iv) Show boxplot of the data. 3,4,4,4