

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 5th
Subject Code: 03606331
Subject Name: Data Mining

Date: (10/08/2022)
Time: (1hr: 30min)
Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

| Q.1 | Answer any six out of Ten. (2 Marks Each) | (12) | | | | | | | | | | | | |
|--------------|---|-------------|-----------|----|---|----|---|----|---|----|---|--------------|-----------|--|
| | 1. List out the features of Data Mining. | | | | | | | | | | | | | |
| | 2. Define Characteristics of Data Warehouse. | | | | | | | | | | | | | |
| | 3. What is Data Mart? | | | | | | | | | | | | | |
| | 4. Define definition of Data Mining with Example. | | | | | | | | | | | | | |
| | 5. List out any 6 Data Mining Application. | | | | | | | | | | | | | |
| | 6. Difference between Data & Information. | | | | | | | | | | | | | |
| | 7. Find out the median of following set of values. {51,22,63,87,94,65,77,52} | | | | | | | | | | | | | |
| | 8. Find out the Mean of following Data. | | | | | | | | | | | | | |
| | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="padding: 2px;">Age</th> <th style="padding: 2px;">Frequency</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">25</td> <td style="padding: 2px;">7</td> </tr> <tr> <td style="padding: 2px;">30</td> <td style="padding: 2px;">3</td> </tr> <tr> <td style="padding: 2px;">18</td> <td style="padding: 2px;">6</td> </tr> <tr> <td style="padding: 2px;">42</td> <td style="padding: 2px;">8</td> </tr> <tr> <td style="padding: 2px;">Total</td> <td style="padding: 2px;">24</td> </tr> </tbody> </table> | Age | Frequency | 25 | 7 | 30 | 3 | 18 | 6 | 42 | 8 | Total | 24 | |
| Age | Frequency | | | | | | | | | | | | | |
| 25 | 7 | | | | | | | | | | | | | |
| 30 | 3 | | | | | | | | | | | | | |
| 18 | 6 | | | | | | | | | | | | | |
| 42 | 8 | | | | | | | | | | | | | |
| Total | 24 | | | | | | | | | | | | | |
| | 9. What is Data Cube? | | | | | | | | | | | | | |
| | 10. Define the History of Data Mining. | | | | | | | | | | | | | |
| Q.2 | A) Difference between Classification & Clustering. | (03) | | | | | | | | | | | | |
| | OR | | | | | | | | | | | | | |
| | A) Explain following Data Mining techniques. 1) Regression 2) Association Analysis | (03) | | | | | | | | | | | | |
| | B) Explain Enterprise Data Warehouse with Diagram. | (03) | | | | | | | | | | | | |
| | OR | | | | | | | | | | | | | |
| | B) Explain Virtual Data Warehouse with Diagram. | (03) | | | | | | | | | | | | |
| | C) Difference between dependent & independent Data Mart. | (04) | | | | | | | | | | | | |
| | OR | | | | | | | | | | | | | |
| | C) Difference between OLAP & OLTP. | (04) | | | | | | | | | | | | |
| | D) Explain data warehouse schemas. | (04) | | | | | | | | | | | | |
| Q.3 | A) Explain all Qualitative Data Attributes. | (03) | | | | | | | | | | | | |
| | OR | | | | | | | | | | | | | |
| | A) Explain all Quantitative Data Attributes. | (03) | | | | | | | | | | | | |
| | B) Explain Roll up and Drill down operations of Data Cube. | (03) | | | | | | | | | | | | |
| | OR | | | | | | | | | | | | | |
| | B) Explain Slicing & dicing and Pivot operations of Data Cube. | (03) | | | | | | | | | | | | |
| | C) Define Major Issues of Data mining. | (04) | | | | | | | | | | | | |
| | OR | | | | | | | | | | | | | |
| | C) What are the functionalities of data mining? | (04) | | | | | | | | | | | | |
| | D) Explain KDD Process with Diagram | (04) | | | | | | | | | | | | |

