MBA III Semester Supplementary Examinations May 2019
## DATA WAREHOUSING & MINING
(For students admitted in 2017 only)

Time: 3 hours                                                                          Max. Marks: 60

### All questions carry equal marks
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## SECTION – A
(Answer the following: (05 X 10 = 50 Marks)

1  (a)  A data warehouse is a key technology in a decision support system. Justify this statement.
   (b)  Discuss briefly the various applications of data warehouse.

**OR**

2  (a)  The organizational memory is an important prerequisite for organizational learning. Explain with suitable example.
   (b)  Give reasons why data management is important to any organization.

3  Explain the roles and responsibilities of various users (including administrators) of a database system.

**OR**

4  Explain how data is shared between different levels within and across organizations.

5  Give an outline of the various multi-dimensional data structures.

**OR**

6  (a)  Explain briefly the different types of meta data.
   (b)  Give an overview of importance of meta data.

7  Explain the steps involved in building a data warehouse.

**OR**

8  Explain the data warehouse designing methodologies.

9  Consider the dataset given below and construct decision tree using information gain.

| Index | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | 4.8 | 3.3 | 1.8 | 0.3 | Positive |
| 2 | 5 | 3 | 1.5 | 1.3 | Positive |
| 3 | 5 | 3.3 | 1.5 | 0.3 | Positive |
| 4 | 5.2 | 3.5 | 1.4 | 0.3 | Positive |
| 5 | 5.2 | 3.3 | 1.3 | 0.3 | Positive |
| 6 | 4.7 | 3.2 | 1.5 | 0.3 | Positive |
| 7 | 4.8 | 3.1 | 1.5 | 0.3 | Negative |
| 8 | 5.4 | 3.4 | 1.4 | 0.5 | Negative |
| 9 | 6.4 | 3.2 | 4.6 | 1.5 | Negative |
| 10 | 6.9 | 3.2 | 4.6 | 1.6 | Negative |
| 11 | 5.3 | 2.8 | 4.8 | 1.3 | Negative |
| 12 | 4.6 | 2.3 | 4.1 | 1.6 | Negative |

**OR**

10  Give a short overview of Feedforward neural network, multilayer perceptron and backpropagation method.

## SECTION – B
(Compulsory question, 01 X 10 = 10 Marks)

11  **Case Study:**
    Design a data warehouse for retail store and explain its components and suggested data marts.