

(2 Hours.)

[Total Marks: 60]

N. B.: (1) All questions are compulsory.

(2) Numbers to the right indicate marks.

(3) Make suitable assumptions wherever necessary and state the assumptions made.

(4) Answers to the same question must be written together.

(5) Mixing of Sub-Questions is not allowed.

(6) Draw neat labelled diagrams wherever necessary.

1. Attempt any two of the following:

12

- What is the Data, Information, Knowledge and Wisdom (DIKW) Pyramid?
- What is DSS? Explain various types of DSS.
- State the benefits of Business Intelligence.
- What is Binning? Explain Equal Width and Equal Depth Binning.

2. Attempt any two of the following:

12

- How does a data warehouse differ from a database?
- What is an operational data store (ODS)?
- Discuss the benefits of data warehouse.
- What is KDD? Explain the process of KDD in detail.

3. Attempt any two of the following:

12

- Explain various approaches to build data warehouse.
- Explain the various OLAP operations.
- Describe Star schema in detail.
- State the steps to create a dimension model.

4. Attempt any two of the following:

12

- Describe the architecture of data mining.
- Explain Market Basket Analysis with an example.
- Discuss Apriori algorithm with its advantages and disadvantages.
- Explain multidimensional and multilevel association rules with example.

5. Attempt any two of the following:

12

- What is Decision cycle? Explain with an example.
- Explain data warehouse architecture in detail.
- Explain the terms: Frequent Itemsets, Closed Itemsets and Association Rule
- Elaborate OLTP in detail.
