

Day : Tuesday
Date : 11-01-2022

W-11058-2021

Time : 02:00 PM-05:00 PM
Max. Marks: 100

N.B.:

- 1) Attempt any **FOUR** questions from Section –I and any **TWO** questions from Section –II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SAME** answer book.

SECTION-I

- Q.1** Explain Business Intelligence process. **(15)**
- Q.2** Describe Association Rule Mining with a suitable example. **(15)**
- Q.3** What is Data Mining? Explain KDD process in detail. **(15)**
- Q.4** Differentiate between OLAP and OLTP. **(15)**
- Q.5** What is multi-dimensional data model? Explain star schema and snowflake schema of data warehouse with suitable example. **(15)**
- Q.6** Explain Decision Support System in detail. **(15)**
- Q.7** Write short notes on any **THREE** of the following: **(15)**
- a) MOLAP Model
 - b) Data Cleaning Process
 - c) Clustering
 - d) Informatica BI Tool

SECTION-II

- Q.8** What are the major clustering methods? Explain K- Means methods in detail. **(20)**
- Q.9** Consider following transactional data for XYZ Electronics Pvt. Ltd. **(20)**

T ₁₁	P ₁ , P ₂ , P ₅
T ₁₂	P ₂ , P ₄
T ₁₃	P ₂ , P ₃
T ₁₄	P ₁ , P ₂ , P ₄
T ₁₅	P ₁ , P ₃
T ₁₆	P ₂ , P ₃
T ₁₇	P ₁ , P ₃
T ₁₈	P ₁ , P ₂ , P ₃ , P ₅
T ₁₉	P ₁ , P ₂ , P ₃

Write an Apriori algorithm and apply it on above transactional data for min_support = 2.

- Q.10** a) What is data warehouse? Explain three tier architecture of Data Warehouse. **(10)**
- b) Explain different users and benefits of data warehouse. **(10)**

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