F–4951	Sub. Code
	7BCEE1A

B.Sc. DEGREE EXAMINATION, APRIL 2021 &

Supplementary / Improvement / Arrear Examinations

Fifth Semester

Computer Science

Elective – DATA MINING AND DATA WAREHOUSING

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is data warehouse?

2. Why we have a separate data warehouse?

3. How are organizations using the information from data warehouse?

4. State the importance of Tuning Queries.

5. What is multidimensional data model?

6. Why preprocess the data?

7. What is OLAP?

8. Why are decision tree classifiers so popular?

9. How does classification differ from prediction?

10. What is multi level association rule mining?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe about the data mining steps in the process of knowledge discovery.

Or

(b) Discuss the typical process flow within a DWH.

12. (a) Elucidate the importance of Process and Load managers.

Or

(b) Confer the tools to manage a data warehouse.

13. (a) Explain how Data warehouses differ from Operational Database Systems?

Or

(b) Draw the architecture of a Typical Data Mining System.

14. (a) Describe the execution principle of DSS.

Or

(b) Explain the types of OLAP servers with suitable diagrams. List its merits and drawbacks.

15. (a) Discuss how association rule mining on multidimensional data cubes could be performed.

Or

(b) Discuss in detail about the kinds of patterns can be mined.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the working principle of Query Management Process.

17. Discuss "Tuning the DWH" with an example.

18. Discuss about the major issues in Datamining.

19. Describe in detail about the basic algorithm of decision tree induction.

20. Generate association rules and calculate its confidence value for the frequent itemset {2, 3, 5} of the following transactional database and find out the strong rules of the above itemset where its minimum confidence threshold value is 67%.

TID	List of item-IDs
T100	1,3,4
T200	2, 3, 5
T300	1, 2, 3, 5
T400	2, 5

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