

Reg. No. : 3321987033

Name :

Fourth Semester BCA. Degree Examination, May 2021

Career Related First Degree Programme under CBCSS

Group 2(b) – Computer Applications

Core course

CP 1444 – DATAMINING AND WAREHOUSING

(2019 Admission Regular)

Time : 3 Hours

Max. Marks : 80

SECTION – A [very short answer type]

One word to max one sentence. Answer **all** question. Each carries **1** marks.

1. Expand OLAP.
2. What do you mean by data mining?
3. What is a relational database?
4. What is a multimedia database?
5. What is a frequent itemset? Give an example.
6. What is support?
7. What is an outlier?

P.T.O.

8. What do you mean by interestingness?

9. What is the purpose of data cleaning?

10. What is a fact table?

(10 × 1 = 10 Marks)

SECTION – B [Short Answer]

Not to exceed **one** paragraph, answer any **eight** questions. Each question carries **two** marks.

11. Name four different methods by which a classification model can be represented.

12. What do you mean by task-relevant data?

13. What is background knowledge? Give an example.

14. Mention the four categories of data preprocessing.

15. What do you mean by attribute construction or feature construction?

16. What is numerosity reduction?

17. What do you mean by a multidimensional data model?

18. Mention the differences between a data warehouse and an operational database.

19. Name the various operations that could be done on an OLAP server.

20. What is ROLAP?

21. What is a virtual warehouse?

22. What is technical metadata in a data warehouse?

23. What is lift?
24. What is tree pruning?
25. What do you mean by accuracy of a rule?
26. What is an asymmetric binary variable? Give example

(8 × 2 = 16 Marks)

SECTION – C [Short Essay]

Not to exceed **120** words, answer any **six** questions. Each question carries **four** marks.

27. Write down the K-means algorithm for cluster analysis.
28. Explain data warehouse with a diagram.
29. How will you handle missing data?
30. Explain the various methods for data transformation
31. Explain decision tree and its uses.
32. Explain IF-THEN rules for classification
33. Explain the concept of regression
34. Draw the architecture of a typical data mining system.
35. What is DMQL? Give an example.
36. What is cluster analysis? Mention different methods for clustering.
37. Explain various data mining classification systems.
38. Mention different types of association rules and give examples for each.

(6 × 4 = 24 Marks)

SECTION – D [Long Essay]

Answer **any two** questions. Each question carries **15** marks.

- 39. Describe various data mining functionalities.
- 40. Explain with diagram, various schema for multidimensional data model.
- 41. Explain apriori algorithm with example.
- 42. Discuss Bayesian classification.
- 43. Explain classification by decision tree induction.
- 44. Explain the requirements of clustering in data mining.

(2 × 15 = 30 Marks)
