B.Sc / BCA DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Sixth Semester

CHOICE BASED CORE COURSE - CS6CBT02 - DATA MINING

Common for B.Sc Information Technology Model III, Bachelor of Computer Applications & B.Sc Computer Applications Model III Triple Main

2017 Admission Onwards

881EE181

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What is a frequent itemset? Give an example.

2. What is the purpose of data cleaning?

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

4. What are the advantages of using a data warehouse in a business?

5. Mention 4 applications of classification and prediction.

6. What is tree pruning?

7. What is posterior probability?

8. What is eager learning? Name a classification method that belongs to eager learning.

9. Mention any two algorithms for density based clustering.

10. What is a core point?

11. What do you mean by description-based retrieval systems in multimedia mining?

12. What is a word stem?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain tight coupling and semi-tight coupling in data mining systems.

14. Explain the concept of lattice of cuboids with an example.

15. Explain bitmap indexing of OLAP data.

16. Explain quantitative association rules with examples. How to map quantitative association rules to a single association rule?

17. Explain rule based classification and rule extraction from a decision tree.

18. Explain ratio scaled variables with its dissimilarity matrix.

19. Differentiate the concept of CLARA and CLARANS.

20. Explain various types of dimensions in a spatial data cube.

21. Explain the challenges in knowledge discovery in WWW.

(6×5=30)

Part C

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

22. Explain various sources from which data is generated.

23. Explain various schema involved in conceptual modelling of a data warehouse.

24. Explain the concept of apriori algorithm with an example.

25. Explain hierarchical method of clustering.

(2×15=30)