



23105106

**QP CODE: 23105106**

**Reg No** : .....

**Name** : .....

**B.Sc / BCA DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS,  
MARCH 2023**

**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

46FD6FD7

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 do you mean by interestingness?
3. What do you mean by generalization?
4. What is a virtual warehouse?
5. Explain progressive deepening in multi-level association rule mining with an example.
6. What is lift?
7. Mention 4 applications of classification and prediction.
8. What is eager learning? Name a classification method that belongs to eager learning.
9. Explain grid based method for clustering.
10. What are the advantages of density-based method for clustering?
11. What are image sample-based queries?
12. What is synonymy problem in text mining?

(10×2=20)





### Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain the concept of binning with an example.
14. Differentiate between OLAP and OLTP.
15. Explain the different views in a business analysis framework.
16. Explain how to calculate information gain with an example.
17. Explain Bayes' Theorem used in Bayesian classification.
18. Explain how to calculate dissimilarity matrix for categorical variables with example.
19. Differentiate the concept of CLARA and CLARANS.
20. Explain the challenges regarding the construction and utilization of spatial data warehouse.
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 the architecture of a typical data mining system with diagram.
23. Explain various schema involved in conceptual modelling of a data warehouse.
24. Explain the concept of prediction with an example.
25. Explain hierarchical method of clustering.

(2×15=30)

