

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086**  
**(For candidates admitted from the academic year 2010 - 11)**

**SUBJECT CODE: BI/PC/DM34**

**M. Sc. DEGREE EXAMINATION, NOVEMBER 2011**  
**BIOINFORMATICS**  
**THIRD SEMESTER**

**COURSE : CORE**  
**PAPER : DATA MINING AND MACHINE LEARNING**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL THE QUESTIONS:** **(20x1=20)**  
**CHOOSE THE CORRECT ANSWER:**

1. Define relational databases.
2. What is a data warehouse?
3. Give two applications of data mining in bioinformatics.
4. What is data integration?
5. Give the use of Apriori algorithm.
6. What is multi relational data mining?
7. Define clustering.
8. Define data running.
9. What is SOM?
10. What are the uses of SVM?
11. Define Data Mining.
12. Give any two examples for application adapted Data Mining.
13. What is an inconsistent data?
14. What is field overloading?
15. Define clusters.
16. List any one approach of computing the dissimilarity between objects of mixed variable type.
17. Why is Data Mining important?
18. List the major components of a Data Mining system.
19. What is an Association Rule Mining?
20. What is a decision tree?

**SECTION – B**

**ANSWER ANY FOUR QUESTIONS IN 300 WORDS EACH. ALL QUESTIONS CARRY EQUAL MARKS: (Draw Diagrams wherever necessary) (4x10=40)**

21. Describe about data mining functionalities concept.
22. Write a note on genetic algorithm.
23. Explain data reduction.
24. Explain cluster analysis in detail.
25. Write a short note on data mining applications.
26. What is neural network/ Give the learning rules.
27. What are the major issues in data mining?

**SECTION –C**

**ANSWER ANY TWO OF THE FOLLOWING QUESTIONS IN 800 WORDS EACH. ALL QUESTIONS CARRY EQUAL MARKS: (Draw Diagrams wherever necessary) (2x20=40)**

28. Write about classification and prediction and evolution and deviation analysis of data mining.
29. Explain about Apriori algorithm
30. Mention the types of clustering methods and types of data in clustering analysis.
31. (i). Describe any one learning algorithm and model evaluation.  
(ii) write a short note on SOM and SVM in detail.

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