Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer any TEN questions.

- 1. What are the advantages of association rules?
- 2. Write a note on prediction.
- 3. What is classification?
- 4. Define; "Bayes Theorem".
- 5. What are the difference between the regression and correlation?
- 6. Show the use of similarity measures.
- 7. What is CART?
- 8. Give the purpose of C4.5.
- 9. Define: "Divisive Clustering".
- 10. What do you mean by Perceptrons?
- 11. State the large itemsets in association rules.
- 12. Mention the multiple-level association rules.

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 13. Summarize the metrics of data mining.
- 14. What are the social implications of data mining? Explain.
- 15. Explain the implementation of decision trees in data mining.
- 16. Describe the simple approach of distance-based algorithms.
- 17. Elaborate the purpose of neural network supervised learning.
- 18. Bring out the steps to generating rules from a neural net.
- 19. Distinguish between the data parallelism and task parallelism.

PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 20. Outline the data mining and knowledge discovery in databases.
- 21. Discuss the statistical perspective on data mining.

- 22. Illustrate the activation functions in neural networks.
- 23. Examine the regression in statistical-based algorithms.
- 24. Demonstrate the implementation of Apriori algorithm with simple example.