LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



M.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

SECOND SEMESTER - APRIL 2016

CS 2956 - NEURAL NETWORKS

Date: 27-04-2016	Dept. No.	Max. : 100 Marks
Time: 01:00-04:00		

SECTION-A

ANSWER ALL THE QUESTIONS:

(10x2=20 marks)

- 1. Write down the properties of Neural Networks.
- 2. What do you mean by excitation in Neural Network?
- 3. Define Rote Learning.
- 4. What is Generalization?
- 5. Write down the purpose of Incremental Information structure.
- 6. State Bayesian theorem.
- 7. What is Hybrid model?
- 8. What is Divide and Conquer technique?
- 9. Define spatiotemporal data.
- 10. What is spatial Summation?

SECTION-B

ANSWER ALL THE QUESTIONS:

(5x8=40 marks)

11. a) Explain the different types of interconnection scheme in Neural Network.

(OR)

- b) Explain the Kohen Networks.
- 12. a) Explain the classification scheme of AI Learning.

(OR)

- b) Explain the Version space algorithm.
- 13. a) Write the COBWEB algorithm and explain.

(OR)

- b) Explain the ID3 algorithm with example.
- 14. a) Explain the Temporal Model.

(OR)

- b) Explain about Genetic Search.
- 15. a) Explain the following:

(i) Connectionist representation

(4 Marks)

(ii) Distributed representation

(4 Marks)

(OR)

b) Explain the Time delay Neural Networks.

SECTION-C ANSWER ANY TWO QUESTIONS: (2x20=40 marks)16. i) Discuss in detail about Bidirectional Associative Memory (BAM) with example. (10)ii) Explain in detail about back propagation algorithm with example. (10)17. i) Explain the counter propagation Networks. (10)ii) Discuss in detail about Probabilistic Neural Networks. (10)18. i) Describe the concept Conceptual Clustering in detail. (10)ii) Explain about Knowledge based Neural Network Architecture. (10)