



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIFTH SEMESTER – NOVEMBER 2017

CA 5955 - NEURAL NETWORKS USING MATLAB

Date: 10-11-2017
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

Part-A

Answer ALL Questions

(10 * 2= 20)

1. What is Recurrent network?
2. Define Sigmoid function.
3. Define the term topology in Neural network.
4. Give an example for Supervised learning.
5. Define System theory
6. Define Digraph.
7. Define Hamming network
8. What is Divide and conquer approach?
9. Define spatial representation.
10. What is signal to symbol transformation?

Part – B

Answer ALL Questions

(5 * 8= 40)

11. a) Explain the Basic concepts of neural network.
(or)
b) Explain is a Hopfield Nets for Optimization Model.
12. a) Explain Statistical learning in detail.
(or)
b) Write short notes on Meta-DENDRAL algorithm.
12. a) Explain the principles of Incremental information structure in detail.
(or)
b) Write short notes on Incremental RBCN.
14. a) Write short notes on Parallel models
(or)
b) Explain Conceptual clustering algorithm in detail.

15. a) write short notes on the following neural network in detail

i) Temporal summation ii) Frequency coding

(or)

b) Write short notes on static neural network model.

Part – C

Answer any TWO Questions

(2 * 20= 40)

16. a) Explain Single layer and multiple layer perceptron algorithms with an example.

b) Explain Backpropagation Algorithm in detail.

17. a) Discuss Knowledge-Based approaches in detail.

b) Discuss Kohonens's Self organizing nets in detail.

17. a) Explain Recurrent and complex neural network in detail

b) Discuss Rule based Approaches in detail.