



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE**

SECOND SEMESTER – APRIL 2018

**17/16PCS2ES02- NEURAL NETWORKS**

Date: 25-04-2018  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**SECTION-A**

**ANSWER ALL THE QUESTIONS:**

**(10\*2=20)**

1. Define Feedforward network. .
2. What is order of the network?
3. Differentiate supervised learning from unsupervised learning.
4. What is Network Pruning?
5. What is conjunction unit?
6. Define Network Training.
7. Define Incremental Learning.
8. Differentiate open system from closed system.
9. Define Hybrid model.
10. What is discovery?

**SECTION-B**

**ANSWER ALL THE QUESTIONS:**

**(5\*8=40)**

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

(OR)

- b) Explain the single layer perceptron algorithm.

- 12.a) Explain about different classifications of AI Learning.

(OR)

- b) Explain about COBWEB algorithm.

13. a) Explain the rule based neural networks.

(OR)

- b) What do you mean by Network Training? Explain.

14. a) Explain about cascade correlation learning.

(OR)

- b) Explain about graph based approaches for neural network.

15. a) Explain about conceptual clustering.

(OR)

- b) Explain about Genetic search.

**SECTION-C**

**ANSWER ANY TWO:**

**(2X20=40)**

16. i) Discuss in detail about Hopfield nets for Association model. (10)  
ii) Explain in detail about back propagation algorithm with example. (10)
17. i) Discuss in detail about ID3 algorithm with example. (10)  
ii) Discuss in detail about Probabilistic Neural Networks. (10)
18. i) Describe the concept of Counter propagation Networks in detail. (10)  
ii) ) Explain in detail about the Temporal model. (10)