



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

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

**SECOND SEMESTER – APRIL 2017**

**16PCS2ES02- NEURAL NETWORKS**

Date: 28-04-2017  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**SECTION-A**

**ANSWER ALL THE QUESTIONS:**

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

1. Define Classification.
2. Write down the neural network properties.
3. Define Learning.
4. What is Network Pruning?
5. What is disjunction?
6. Define decision tree.
7. Define Incremental Learning.
8. State Bayesian theorem.
9. Define parallel model.
10. What is Divide and Conquer technique?

**SECTION-B**

**ANSWER ALL THE QUESTIONS:**

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

11. a) Write down the Neural Network Learning Algorithm and Explain.  
(OR)  
b) Explain the single layer perceptron algorithm.
12. a) Explain the Version space algorithm.  
(OR)  
b) Explain about COBWEB algorithm.
13. a) Explain decision tree based neural networks.  
(OR)  
b) What do you mean by Network Training? Explain.
14. a) Explain about Equations based approaches for neural network.  
(OR)  
b) Explain about graph based approaches for neural network.
15. a) Explain about Counter propagation networks.  
(OR)  
b) Explain about Genetic search.

## SECTION-C

**ANSWER ANY TWO: (2X20=40)**

16. i) Discuss in detail about Bidirectional Associative Memory with example. (10)  
ii) Explain in detail about back propagation algorithm with example. (10)
17. i) Discuss in detail about ID3 algorithm with example. (10)  
ii) Explain the Rule based neural networks. (10)
18. i) Explain in detail about Cascade Correlation Learning. (10)  
ii) Explain in detail about the Temporal model. (10)

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