



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

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

**SECOND SEMESTER – APRIL 2017**

**CS 2956- NEURAL NETWORKS**

Date: 03-05-2017  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**SECTION-A**

**ANSWER ALL THE QUESTIONS:**

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

1. Define Perceptron.
2. What is lateral inhibition in Neural Network?
3. Define Learning.
4. What is Network Pruning?
5. Define Incremental Learning.
6. State Bayesian theorem.
7. Write a note on Hamming Networks.
8. What is Divide and Conquer technique?
9. Define spatiotemporal data.
10. What is spatial Summation?

**SECTION-B**

**ANSWER ALL THE QUESTIONS:**

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

11. a) Explain the tasks involved in constructing the Neural Network.

**(OR)**

- b) Explain the single layer perceptron algorithm.

12. a) Explain about the supervised and unsupervised learning.

**(OR)**

- b) Explain the Version space algorithm.

13. a) Give an account on system Identification and control.

**(OR)**

- b) Explain the COBWEB algorithm.

14. a) Explain the counter propagation Networks.

**(OR)**

- b) Explain about Genetic Search.

15. a) Explain the Connectionist representation.

**(OR)**

- b) Explain the Time delay Neural Networks.

**SECTION-C**

**ANSWER ANY TWO:**

**(2X20=40)**

16. i) Discuss in detail about Kohonen Networks 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 in detail about Cascade Correlation Learning. **(10)**
18. i) Explain in detail about the Temporal model. **(10)**  
ii) Explain about Knowledge based Neural Network Architecture. **(10)**

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