LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

SECOND SEMESTER – NOVEMBER 2016

CS 2956 - NEURAL NETWORKS

Date: 14-11-2016   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

SECTION-A

ANSWER ALL THE QUESTIONS: (10*2=20)

1. Write down the properties of Neural Networks.

2. What do you mean by inhibition in Neural Network?

3. Define supervised Learning.

4. What is Network Pruning?

5. Define Incremental Learning.

6. State Kolmogorove theorem.

7. What is Hybrid model?

8. What is Divide and Conquer technique?

9. Define spatiotemporal data.

10. What is temporal summation?

SECTION-B

ANSWER ALL THE QUESTIONS: (5*8=40)

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

    (OR)

    b) Explain the single layer perceptron algorithm.

12. a) Explain the ID3 algorithm in detail.

    (OR)

    b) Explain the Version space algorithm.

13. a) Write the COBWEB algorithm and explain.

    (OR)

    b) Explain the counter propagation Network.

14. a) Explain the Temporal Model.

    (OR)

    b) Explain about Genetic Search.

15. a) Explain about Feature extraction and problem abstraction.

    (OR)

    b) Explain about Time delay Neural Networks.

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

16. i) Discuss in detail about Hop field Nets with example.   **(10)**

     ii) Explain in detail about back propagation algorithm with example.   **(10)**

17. i) Discuss in detail about Probabilistic Neural Networks.   **(10)**

     ii) Explain the cascade correlation Learning.   **(10)**

18. i) Discuss in detail about Conceptual Clustering.   **(10)**

     ii) Explain the spatiotemporal networks.   **(10)**

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