# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FIRST SEMESTER – NOVEMBER 2009

**CS 1812 - COMPUTER NETWORKS**

Date & Time: 06/11/2009 / 1:00 - 4:00 Dept. No. Max. : 100 Marks

**SECTION-A**

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

1. What is Frequency Division Multiplexing?
2. Draw a Protocol Graph.
3. What is stop and wait protocol?
4. State the role of a token in a token ring.
5. What is packet switching?
6. Differentiate Multicast and Unicast.
7. Mention the significance of AIMD.
8. What is flow Control?
9. What is DNS ?
10. What is JPEG?

**SECTION-B**

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

11. a) Explain Internet Architecture.

(OR)

b) Explain the functions of Data Link Layer and Session Layer of OSI Model.

12. a) Discuss about Byte Oriented Protocols in the context of Framing.

(OR)

b) Explain the method of detecting errors using CRC with calculations.

13. a) Explain Virtual Circuit Switching.

(OR)

b) Discuss about Distance Vector Routing.

14. a) Explain how connection is established and terminated in TCP using State Transition Diagram?

(OR)

b) What is Congestion Avoidance? Explain the mechanism involved in RED.

15. a) Discuss about SMTP and MIME.

(OR)

b) What is cryptography? Explain RSA Algorithm.

## SECTION-C

**ANSWER ANY TWO QUESTIONS: (2 X 20 = 40)**

16. (a) What is a switched network? (5)
    (b) Explain Sliding Window in the context of reliable transmission. (10)
    (c ) Write a note on WiMAX. (5)

17. (a) Discuss the physical properties and Access Protocol of Ethernet. (10)
    (b) Explain Spanning Tree Algorithm. (10)

18. (a) Explain Simple Demultiplexer. (10)
    (b) Discuss about Presentation formatting with respect to its taxonomy. (10)

*****