 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **COMPUTER SC.**

FIRST SEMESTER – **APRIL 2012**

# CS 1812 - COMPUTER NETWORKS

Date : 27-04-2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**SECTION-A**

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

1. What is Frequency Division Multiplexing?

2. Define reliability in data transmission.

3. State the frame format of Ethernet.

4. State the role of a token in a token ring.

5. What is Circuit switching?

6. Define Broadcasting.

7. Mention the significance of AIMD.

8. What is Congestion Control?

9. State the significance of DNS.

10. What is cryptography?

**SECTION-B**

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

# 11. a) Explain Internet Architecture.

# (OR)

b) Explain the functions of Physical Layer and Data Link 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 LRC with calculations.

13. a) Explain in brief about datagram forwarding in IP.

(OR)

b) Discuss about Distance Vector Routing.

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

(OR)

b) Discuss in brief about Simple demultiplexer.

15. a) Discuss about the components of SNMP.

(OR)

b) What is encryption and decryption? Explain RSA Algorithm.

**SECTION-C**

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

16. (a) Explain layering and protocols with respect to network architecture in

detail. (10)

(b) Elaborate about token rings. (10)

17. (a) Discuss about Internetworking with a neat diagram. (10)

(b) Explain Congestion avoidance with any one mechanism in detail. (10)

18. (a) Explain in detail about data compression. (10)

(b) Discuss about Silly window syndrome with respect to Nagle’s

algorithm. (10)

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