 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – APRIL 2011

# CS 3813 - TCP/IP PROTOCOL

Date : 12-04-2011 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**SECTION-A**

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

1. Differentiate ARP and RARP.

2. Find the class of the following address and also convert it into binary notation.

193.14.56.22

3. What is fragmentation?

4. Mention the ICMP error reporting messages.

5. List out the UDP operations.

6. Define Process to Process communication.

7. Compare SI and SSN.

8. What is a SCTP association?

9. What is a dynamic document?

10. What is the role of MIB?

**SECTION-B**

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

# 11. a) Explain about the different levels of addressing.

# (OR)

b) Explain the salient features of ARP with its packet format.

12. a) Explain about the ICMP query messages.

(OR)

b) Discuss in brief the debugging tools used in Internet.

13. a) Discuss about the TCP services.

(OR)

b) Discuss about three way handshaking in TCP.

14. a) Draw the common layout of a chunk and explain any 3 chunks.

(OR)

b) Explain the concept of Flow control in SCTP with examples.

15. a) Discuss in brief about the types of FTP connections.

(OR)

b) Explain briefly the following:

(i) TFTP (ii) SMTP.

**SECTION-C**

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

16. (a) Explain in brief about TCP/IP protocol suite with a neat diagram. (10)

(b) Explain the structure of a router and the common fields in a routing

table. (10)

17. (a) Explain the IGMP Operations in detail. (10)

(b) Discuss in detail about the Congestion Control in TCP. (10)

18. (a) Compare the features of UDP, TCP and SCTP. (10)

(b) Explain the following: (5) + (5)

(i) MIME (ii) SNMP

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