 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – **APRIL 2012**

# CS 3813 - TCP/IP PROTOCOL

Date : 24-04-2012 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**SECTION-A**

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

1. What is the key function of RARP?

2. Define subnetting.

3. Name any one debugging tool and mention its usage.

4. What are the ICMP error reporting messages?

5. Enumerate the UDP operations.

6. Define Process to Process communication.

7. Write down the significance of SI in SCTP.

8. Draw the format of an ACK chunk.

9. Differentiate FTP and TFTP.

10. What are cookies?

**SECTION-B**

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

# 11. a) Explain about the different fields in a routing table with its purpose. (OR)

b) Discuss in brief about ARP and draw its packet format.

12. a) Explain checksum with respect to IP datagram.

(OR)

b) Discuss in brief the ICMP query messages with its usage.

13. a) Explain in detail the error control in TCP.

(OR)

b) Discuss in brief about the flow control in TCP and its significance.

14. a) Draw the State Transition Diagram of SCTP and explain the scenario of

simultaneous open.

(OR)

b) Draw the common layout of a chunk and explain any 3 chunks in detail.

15. a) Discuss in brief about the management components of SNMP.

(OR)

b) Explain briefly the following:

(i) HTTP (ii) CGI

**SECTION-C**

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

16. (a) Draw the TCP/IP protocol stack and explain all the layers and its protocols. (10)

(b) Discuss in brief about the IGMP Package. (10)

17. (a) Explain the process of controlling congestion in TCP. (10)

(b) Elaborate the steps involved in 4 way handshaking in SCTP with a neat diagram. (10)

18. (a) Elaborate the significance and usage of SMTP. (10)

(b) Discuss about the flow control in SCTP with a neat diagram. (10)

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