LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – NOVEMBER 2011

CS 3813 - TCP/IP PROTOCOL

Date : 02-11-2011
Time : 9:00 - 12:00

Dept. No.

Max. : 100 Marks

SECTION-A

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

1. Differentiate Physical addressing and Logical addressing.

2. Mention the significance of RARP.

3. List out any two different debugging tools and its usage.

4. An IP Packet has arrived with a M bit value of 0. Is this the first fragment, last fragment or middle fragment? Do we know if the packet was fragmented?

5. How UDP acts as a multiplexer?

6. What is silly window syndrome?

7. Draw the format and state the usage of DATA chunk in SCTP.

8. Brief about the role of ECN in SCTP.

9. Mention the services provided by a user agent.

10. Specify the role of MIB in SNMP.

SECTION-B

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

11. a) Discuss in brief the structure of a Router with any two switching fabrics.
       (OR)
    b) Differentiate Next Hop method and Network specific method with suitable examples.

12. a) Illustrate the checksum calculation in IP.
       (OR)
    b) Discuss in brief the ICMP Query messages.

13. a) Explain the various UDP operations.
       (OR)
    b) Explain about connection establishment and data transfer in TCP.

14. a) Compare TSN, SI and SSN with respect to SCTP.
       (OR)

b) Explain in brief about any three control chunks in SCTP.

15. a) Discuss about the various management components of SNMP.

(OR)

b) Explain briefly the following:
(i) HTML   (ii) Cookies

SECTION-C

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

16. (a) Discuss in brief about the salient features of classful addressing.   (10)

   (b) Explain the IGMP operations in detail.   (10)

17. (a) Discuss about the Congestion Policy in TCP with neat diagram(s).   (10)

   (b) Draw the State transition diagram of SCTP and explain the various events and states.   (10)

18. (a) Explain the two different types of FTP connections.   (10)

   (b) Draw the packet format of ARP and explain the fields with its purpose.   (10)

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