

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

THIRD SEMESTER – NOVEMBER 2009

**CS 3813 - TCP/IP PROTOCOL**

Date & Time: 05/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

**PART - A: ANSWER ALL THE QUESTIONS**

**10X2 = 20**

1. What are the common notations to show an IP address?
2. Differentiate between direct and indirect methods of packet delivery.
3. What does the processing module of IP package do?
4. What is IGMP?
5. List out the responsibilities of the Transport layer protocol.
6. Write a note on Stream delivery service.
7. Write down the salient features of SCTP.
8. What are the components of FTP?
9. Write a short note on Simple Network Management Protocol.
10. What are the different categories of web documents?

**PART - B: ANSWER ALL THE QUESTIONS**

**5X8 = 40**

11. a) Discuss the issues related to IP addressing.  
(OR)  
b) Explain the concept of Subnetting.
12. a) Discuss the concept of Fragmentation in Internet Protocol.  
(OR)  
b) Explain the relationship between the components of IGMP package.
13. a) Explain the Error Control mechanism in UDP.  
(OR)  
b) Explain how TCP performs Error Control.
14. a) Explain in detail the services of SCTP.  
(OR)  
b) Explain the packet format of SCTP.

15. a) Explain FTP Command processing with any four types of commands.

(OR)

b) Discuss the architecture of WWW.

**PART - C: ANSWER ANY TWO QUESTIONS**

**2X20 = 40**

16. a) Explain in detail different components of ARP package with their relationship. (10)

b) Discuss in detail the packet format of IP datagram with the options. (10)

17. a) Explain different operations of UDP. (8)

b) Explain the State Transition diagram of TCP with all scenarios. (12)

18. a) Discuss how SCTP performs Error control and Flow control. (10)

b) Explain the different commands and Responses related to message transfer in SMTP.

(10)

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