



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

**M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS**

FOURTH SEMESTER – NOVEMBER 2016

**CA 4958 - NETWORK ADMINISTRATION**

Date: 16-11-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART A**

**Answer ALL Questions**

(10 X 2 = 20 Marks)

1. What is called switch as a network device?
2. State True or False
  - i. SNMP protocol is an Application Layer protocol
  - ii. UDP is a Network Layer protocol.
3. What is Network Address Translation?
4. What is static routing?
5. What is classful addressing?
6. Give the purpose of network mask?
7. What will be the subnet address if the destination address is 200.49.33.58 and the subnet mask is 255.255.240.0
8. What is DHCP ?
9. Mention the advantages of MPLS?
10. Classify the networks as LAN or WAN: Ethernet, SONET, FDDI, ATM, MPLS.

**PART B**

**Answer ALL Questions**

(5 X 8 = 40 Marks)

- 11a. Explain the functions of a router.  
(or)
- 11b. Explain error control in Transport Layer.
- 12a. Describe the ATM frame format.  
(or)
- 12b. Give a summary of ARP Protocol
- 13a. Write short notes on classless addressing.  
(or)
- 13b. Find the range of addresses in the following blocks:
  - i. 123.54.75.32/29
  - ii. 200.17.18.128/27
  - iii. 17.32.16.0/23
  - iv. 181.32.64.64/30
- 14a. Explain the static and dynamic address allocation by DHCP server.  
(or)
- 14b. Describe the errors handled by ICMP protocol
- 15a. Explain briefly about MPLS .  
(or)
- 15b. Explain DSL

**PART C**

**Answer ANY TWO Questions**

(2 X 10 = 20 Marks)

- 16a. Discuss the header format of IP Protocol.
- 16b. Discuss in detail about UDP datagram.
- 17a. Explain in detail about Ethernet evolution.
- 17b. Explain the DHCP packet format with suitable diagram.
- 18a. Describe various levels in DNS.
- 18b. Write short note on Frame Relay.

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