



ENGINEERING & MANAGEMENT EXAMINATIONS, APRIL - 2009

INTERNET TECHNOLOGY**SEMESTER - 8**

Time : 3 Hours]

[Full Marks : 70

GROUP - A**(Multiple Choice Type Questions)**

1. Choose the correct alternative of the following :

10 × 1 = 10

i) The port address uniquely identifies

a) Process

b) Host

c) Server

d) All of these.

ii) Default mask for 193.6.7.2 is

a) 255.0.0.0

b) 255.255.0.0

c) 255.255.255.0

d) none of these.

iii) Which mapping method is used to find a physical address given a logical address ?

a) HTTP

b) ARP

c) DNS

d) RARP.

iv) Which of following is shortcoming of RIP protocol ?

a) Failure

b) Convergence

c) Authentication

d) All of these.

v) Which protocol is used to deliver vital network information to either diskless computers or computers at 1st boot ?

a) HTTP

b) SMTP

c) BOOTP

d) UDP.

**GROUP - C****(Long Answer Type Questions)**

Answer any three questions.

3 × 15 = 45

7. a) Give the differences between directed broadcast & limited broadcast. 3
 b) What is Multicast addressing? 3
 c) "TCP/IP provides a connectionless and reliable transport service". Explain. 4
 d) Give the format of an Internet datagram. 5
8. a) Discuss about routing in an internet. 5
 b) Explain with example the Bellman-Ford Routing. 5
 c) Discuss the autonomous system concept. 5
9. a) What is the purpose of RIP? What are the functions of a RIP message? Why the expiration timer value is six times than that of the periodic timer value? List RIP shortcomings and their corresponding fixes? 5

- b) A router has the following RIP routing table.

Net1	4	B
Net2	2	C
Net3	1	F
Net4	5	G

What would be the contents of the table if the router receives the following RIP from router C.

Net1	2
Net2	1
Net3	3
Net4	7

- c) Why do OSPF messages propagate faster than RIP messages? 7 + 4 + 4



10. a) Is the size of ARP packet fixed ? Explain. 5
- b) What is multicast addressing ? Describe the working principle of transport Gateway. 1 + 3
- c) What is the size of a question record contain an IP address ? 2
- d) When does the DHCP server need to check the static database for address mapping ? What are the types of information can a client receive from a DHCP server when it is booted for the first time in a network ? 2 + 2
11. Write short notes of any *three* of the following : 3 x 5
- a) FTP
- b) OSPF
- c) Frame Relay
- d) VPN
- e) TELNET.

END