



SE-7367

B. E. IV (Sem - VII) (Computer Eng.) Examination
April / May - 2011
Computer Networks - II

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवडी पर अवश्य कपनी. Fillup strictly the details of signs on your answer book.		Seat No. :
Name of the Examination :		<input type="text"/>
B. E. 4 (Sem - 7)		<input type="text"/>
Name of the Subject :		<input type="text"/>
Computer Networks - 2		<input type="text"/>
Subject Code No. :	<input type="text" value="7"/> <input type="text" value="3"/> <input type="text" value="6"/> <input type="text" value="7"/>	<input type="text"/>
Section No. (1, 2,.....):	Nil	
		Student's Signature

- (2) Make assumption whenever required.
(3) Numbers on the right indicate marks.

- 1 (a) Answer the following questions. 10
- (1) What are the responsibilities of Network layer ?
 - (2) Identify the following IP address : 169.5.255.255
 - (a) Host IP address
 - (b) Limited broadcast address
 - (c) Direct broadcast address
 - (d) Network address
 - (3) What destination address can be used to send a packet from a host with IP address 188.1.1.1 to all hosts on the network ?
 - (a) 188.0.0.0
 - (b) 0.0.0.0
 - (c) 255.255.255.255
 - (d) b and c
 - (4) Given the IP address 180.25.21.172 and the subnet mask 255.255.192.0, what is the subnet address ?
 - (a) 180.0.0.14
 - (b) 180.25.0.0
 - (c) 180.25.8.0
 - (d) 180.0.0.0
 - (5) What is the maximum size of TCP header ?

- (6) In _____ routing, the mask and destination addresses are both 0.0.0.0 in the routing table.
- (a) Next-hop (b) Network-specific
(c) Host-specific (d) Default
- (7) _____ is a dynamic mapping protocol in which a logical address is found for a given physical address.
- (a) ARP (b) RARP
(c) ICMP (d) None of the above
- (8) UDP and TCP are both _____ layer protocols.
- (a) Physical (b) Data link
(c) Network (d) Transport
- (9) What is piggybacking ?
- (10) The _____ field is used to order packets of a message.
- (a) Urgent pointer (b) Checksum
(c) Sequence number (d) Acknowledgment number
- (b) Compare and contrast subnet mask and supernet mask. **5**
- (c) A company is granted the site address of 201.70.64.0 **5**
(class c). The company needs six subnets. Design the subnets.

2 Attempt any **three** : **15**

- (1) Explain different types of delivery available with IP protocol.
- (2) Explain TCP timers.
- (3) Explain four different cases of ARP.
- (4) Explain UDP operations in detail.

3 Attempt any **three** : **15**

- (1) Explain various options of IP.
- (2) Discuss routing tables with its different types.
- (3) Briefly explain IGMP operations.
- (4) Discuss TCP services.
- (5) Explain proxy ARP in detail.

4 (a) Answer the following questions : **10**

- (1) Mention intra-domain routing protocols.
- (2) DHCP is a short form of _____

- (3) Which are the different sections in which domain name space of internet is divided ?
 - (4) In TELNET, what does control character AO mean ?
 - (5) How many TCP connections are used by FTP ?
 - (6) Which protocol is used as message transfer agent ?
 - (7) MIB creates a collection of named objects, their types and their relationships to each other in an entity to be managed. This statement is True/False ?
 - (8) Mention the kinds of documents in the WWW.
 - (9) IPv6 address consists of _____ bits.
 - (10) A keepalive timer is used to prevent a long idle connection between two TCPs. This statement is True/False.
- (b) Discuss BGP sessions and types of packets utilized by BGP. 10

- 5 (a) Explain BOOTP operation : 8
- (1) When client and server are on the same network ?
 - (2) When client and server are on the different network ?
- (b) Explain the following terms with respect to DNS : 7
label, FQDN, PQDN, zone, root server, primary server, secondary server.

OR

- 5 (a) Discuss two message access protocols : POP and IMAP. 8
- (b) Briefly explain "Uniform Resource Locator (URL)" and Cookies. 7
- 6 (a) Explain option negotiation in TELNET that is required between client and server to use any of the options. 8
- (b) Discuss various FTP commands. 7