CS/B.Tech (ECE-N)/SUPPLE/SEM-8/EC-804A/2010

2010
INTERNET TECHNOLOGY

Time Allotted : 3 Hours   Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A
(Multiple Choice Type Questions)

1.   Choose the correct alternatives for the following :   10 × 1 = 10

   i)   TCP/IP is the protocol suite for the

   a)   Telephone   b)   Internet

   c)   Cable TV   d)   Telefax.

   ii)   ARP/RARP used in

   a)   Data-link layer   b)   Physical layer

   c)   Network layer   d)   None of these.

   iii)   IP address is a

   a)   32 bit address   b)   16 bit address

   c)   64 bit address   d)   10 bit address.

SE-84   [Turn over

iv) In fixed length subnetting, the number of subnets is a power of

    a)   4   b)   5

    c)   2   d)   3.

v) IP is a

    a)   connection less protocol

    b)   connection oriented protocol

    c)   fixed length protocol

    d)   all are true.

vi) An ARP request is

    a)   broadcast   b)   multicast

    c)   unicast   d)   none of these.

vii) RARP replay packets are

    a)   multicast   b)   broadcast

    c)   unicast   d)   none of these.

viii) Connection in SCTP is called an

    a)   Virtuality   b)   Association

    c)   Network   d)   Path.

ix) BGP supports

    a)   Classfull addressing   b)   Classless addressing

    c)   Broadcast addressing d)   Multicast addressing.

x) BOOTP are

    a)   Server-Server application

    b)   Client-Client application

    c)   Client-Server application

    d)   none of these.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. 3 × 5 = 15

2. Explain different Internet services.

3. Write the properties of Internet.

4. Explain the ARP protocol format.

5. Explain in short, connectionless delivery system.

6. Define frame relay concept in networking.

GROUP – C

(Long Answer Type Questions)
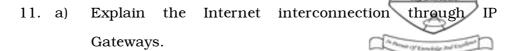
Answer any *three* of the following. 3 × 15 = 45

7. a) Differentiate between Intranet & Internet.

   b) Give detail Idea about classless IP address, network & broadcast address. 6 + 9

8. a) Why is bootstrap protocol necessary ? Explain in detail.

   b) Define vector distance writing with proper example. 7 + 8

9. a) Explain switched WAV services.

   b) Explain why VOIP is necessary in Internet technology.

   6 + 9

10. a) Explain the detail architecture of Internet.

    b) Define the TCP/IP protocol stack. 8 + 7

11. a) Explain the Internet interconnection through IP Gateways.

   b) Define Exterior Gateway protocol in details.   8 + 7

12. Write short notes on any *two* of the following : $2 \times 7\frac{1}{2}$

   a) Configuration of Firewall.

   b) Routing information protocol.

   c) E-mail.

   d) Gateway to Gateway protocol.

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