

- (b) Explain the functions of various layers of TCP/IP model.
- (c) Discuss guided and unguided media with suitable example and diagram.
- (d) Discuss about the channelization of FDMA, TDMA and CDMA.

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BACHELOR OF COMPUTER APPLICATION

Paper : BCAHC6146

(Computer Networks and Internet)

Full Marks : 60

Pass Marks : 24

Time : 3 hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct option (any five) : 1×5=5

- (a) Identify the installation range of LAN.
- (i) Within city
- (ii) Within factory
- (iii) Across countries
- (iv) Across continents

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(Turn Over)

(2)

- (b) Protocol responsible to send e-mail message is
- (i) four
 - (ii) five
 - (iii) seven
 - (iv) ten
- (c) HUB operates in the ____ layer.
- (i) physical
 - (ii) datalink
 - (iii) network
 - (iv) transport
- (d) TCP/IP stands for
- (i) Transmission Control Protocol/ Interface Protocol
 - (ii) Transfer Control Protocol/ Internet Protocol
 - (iii) Transmission Control Protocol/ Internet Protocol
 - (iv) Throughput Control Protocol/ Interface Protocol

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(Continued)

(3)

- (e) Difference between highest frequency and lowest frequency of a composite signal is called
- (i) bandwidth
 - (ii) bit rate
 - (iii) throughput
 - (iv) None of the above
- (f) Checksum is associated with
- (i) network layer
 - (ii) datalink layer
 - (iii) physical layer
 - (iv) application layer
- (g) Identify the odd term out.
- (i) Router
 - (ii) Switch
 - (iii) PC
 - (iv) NIC
- (h) Router is responsible for
- (i) routing of packets
 - (ii) error detection
 - (iii) multiplexing
 - (iv) amplitude modulation

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(Turn Over)

(4)

(f) The digital signal has _____ level(s).

- (i) one
- (ii) two
- (iii) three
- (iv) four

(j) Network of computer networks is called

- (i) intranet
- (ii) internetworking
- (iii) virtual
- (iv) None of the above

2. Answer the following questions (any five) :

2×5=10

- (a) What is computer networking?
- (b) Explain IEEE standard.
- (c) What do you mean by pulse code modulation?
- (d) What is WWW?
- (e) What is block coding?
- (f) What is fast ethernet?
- (g) What does congestion mean in layered architecture?

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(Continued)

(5)

3. Answer the following questions (any five) :

5×5=25

- (a) Explain the working principle of wireless LAN.
- (b) Write about client/server architecture.
- (c) Explain about piggybacking.
- (d) Describe MAC sublayer addressing mechanism.
- (e) Explain UDP.
- (f) Write a short note on domain name system.
- (g) Differentiate between analog and digital transmission.
- (h) Discuss about CSMA and CSMA/CD in detail.
- (i) What is error correcting code (Hamming code)?

4. Answer the following questions (any two) :

10×2=20

- (a) What is meant by data communication? What is its component? What are the characteristics of data communication?

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(Turn Over)