

Total No. of Questions : 5]

SEAT No. :

P1295

[6055]-202

[Total No. of Pages : 2

S.Y.B.Sc. (Computer Science)
CS-242 : COMPUTER NETWORKS - I
(2019 Pattern) (Semester - IV) (24122)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagram must be drawn if necessary.*

Q1) Attempt any EIGHT of the following (out of TEN).

[8×1=8]

- a) Define Bandwidth.
- b) What is throughput?
- c) What is Jitter?
- d) List the control access protocols.
- e) Define packetizing.
- f) Write IPv6 address space.
- g) List UDP services.
- h) Write the list of states for Tcp.
- i) What is full duplex communication?
- j) Write the registered ports.

Q2) Attempt any Four of the following (out of FIVE).

[4×2=8]

- a) Write a note on BSS.
- b) What are the different layers in the TCP/IP reference model?
- c) Write the netid & host ID of IP address: 117. 149. 29.4.
- d) What are the two sub layers of data link layer?
- e) Write the different control bits or flags in control field of TCP segment.

P.T.O.

Q3) Attempt any TWO of the following (out of THREE). [2×4=8]

- a) What is the propagation time for a 2.5 Kbyte message if the bandwidth of the network is 1 Gbps? Assume that the distance between the sender and the receiver is 12,000 km and that light travels at 2.4×10^8 m/s.
- b) Write the some important design issues of the data link layer.
- c) What are the main properties of routing?

Q4) Attempt any TWO of the following (out of THREE). [2×4=8]

- a) Write the difference between TCP & UDP.
- b) Explain sliding window in TCP.
- c) Write the base header format of IPv6.

Q5) Attempt any ONE of the following (out of TWO). [1×3=3]

- a) Describe bus topology in detail.
- b) Write the difference between IPv4 and IPv6.

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