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SEAT No. :

P5144

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S.Y. B.Sc.

COMPUTER SCIENCE

CS - 242 : Computer Networks - I

(2019 Pattern) (Semester - IV)

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) What is Port address?

b) What is the size of IPv4 & IPv6 Address?

c) List application Layer Protocol.

d) "UDP is Connection Oriented Protocol." State the statement is true / false.

e) What is the function of Presentation layer?

f) What is Protocol?

g) Which devices operates at physical layer.

h) What is Bandwidth?

i) What is CSMA/CD?

j) Define Masking.

Q2) **Attempt any FOUR of the following (Out of FIVE).** **[4 × 2 = 8]**

a) Define Terms :

i) Jitter

ii) Latency

b) Write Nyquist & Shannon's formula for calculating data rate of a channel.

c) Define routing.

P.T.O.

d) Define following Data communication standards:

i) De Facto

ii) De Jure

e) Apply bit stuffing on Pattern 01101111111111110010

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

a) Explain Multiplexing & De_multiplexing in transport Layer.

b) What is Taxonomy for Media Access Protocol?

c) Which are the methods of framing.

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

a) Write note on Circuit Switching.

b) For the given IP address 205.16.37.39/28 in some block of address, Calculate :

i) Address Mask

ii) First Address of block

iii) Last address of block

iv) Number of addresses in the block

c) Write note on UDP

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

a) What is BSS & ESS? Explain in detail.

b) Explain TCP/IP Model in detail.