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Roll No: 4

Sec: A | Course Code: CSE 303

Course Title: Data Communication

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Ans to the Q.N-1(a)

My ID is 18101004.

So,
$$X = 4 + 1 = 5$$

and $Y = 0 + 1 = 1$

and $Y = 0 + 1 = 1$

sections that $Y = 0 + 1 = 1$

for, mesh topology, we need $\frac{5}{2}x(x-1)/2$ cuble link = 35 (5-1)/29 6 10 cable link

For, Stare tropology, we need y=1 cable link.

According to the security level & prieter 3 Mesh Topology. Why?

xelque that to eget days a

knihore boath of the easily stratus

studion to be aging and a to be

Ans to the Q. N-1(V).

J. 11 choose Full Juplex data flou for aux communications

Because in this communication the sender and both can mitted and recieve

data at the same time. It's transmission

son made is like a two way road.

Which traffic can flow in both

direction at to the same time.

Advantage for full duplex!

8 × No de delay in communication Dis advantage for full duplex

× No prioper bandwidth.

Advantage of half tuplex:

* where bankwifth ear be utilized an at a time only one signal transmits.

Disadvantage (half typlex). * Delay communication A = d show (y) = X TE de bom L = I Sme 3-29- 11 te 2 in 186-6. 2mg Tiend will in Pell: Senter wee Reciper Tomer 18 Bresien Policing Received John Cont.

Ans to the Q.N-2000 (a)

MY 1D = 18101004

So 3 111 be in pe6 and

Friend will in Pel

· Sewer Mac	Reciareti	Senden IP	Received 1D	Postline Sender
MACOP	mac.	2P	198.	36000
A	0	^	8	
) o name		1

port time Peta Timo Receiver data Timo data 7000 refine

Ans to the Q-N-2(0)

a repries of through detrome meters

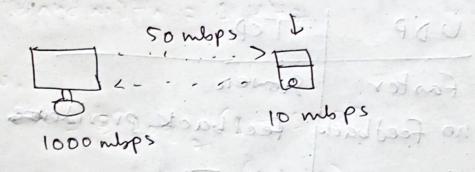
Flow control: Elow control like as data

link layer, transport layer is responsible

for flow control. Flow control is periformed

end to end rather than a correst a

Single link.



Error Controls! Error control at this layer is performed process to process to process rather than across across a single link. It is senting transport layer make sure that the entire message xrrives at the receiving trasport layer with out error Chamage, Loss, suplication it is usually

arrelieved through tetrains mission. Services Protocols -> Connection less

-> Connection less

-> Viser Control

protocol (UDP) UDP TEREGONOS Faster Goven no feedback feed back provides Video games Luw W. Ftp modell it beautopined brocess to broke nother than acress across a single tall the sending transportillatest make for that the English shows a shirt merce the step of langer with the services Comers, toss, suplication, it is usually

As to the Q.N-4. (a) Here, my 1D is 18101004 x = 4 + 1 = 5etanined which ear be tere is a significant SNR = 10 × 1 = 10 Bandwidth 1 MHzw the manner of the state of c = B Log (1 + SNR) 6/0 6 10 2 10 6 log 2 (17 10) evel des 249 = 106 log 2 whops

= 106 log 2 whops

= 3.9 nlops The Shannon Formula gives us 106 log 2 3 ymbps, the upper limit. for better percformance we droose some thing low et mlps.

For better performance we choose something lowers 34 mbps.

Then we use the Nyquist formula to find the number of signal level.

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THE RESIDENCE OF CONTROL STORY

Bit rate: 2 x bandwidth x log2 3.4 mbps = 2x 1nH2 x log2 2 = 3.4.

Bandwidth	Throughput	
Data capacity of a channel which can be transferred in specific period of time	Actual measure of data transferred over a specific period of time	
Measurement unit	Measurement unit is Bits per Second.	
To transfer data	To communicate	
Physical layer of OSI model	Any layer of OSI model	
No depert	Dependent on latency	
Not impact by physical obstructions.	Highly impacted by external interference interference interference notion	
speed of water coming of tap in particular time	Actual flows of out of tap in particular time	