

CSE-320.

MTD

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Sec: 10

Ans to q.n. 1.

(a)

PAN: Personal Area Network.
is the most appropriate for personal use like if you have two + three friends playing game or edit any video then it is appropriate to use PAN. So, it is appropriate for Riya.

LAN or ~~local~~ local Area Network is the most appropriate for home pharmaceutical company as LAN can easily share between thousand of people within a small area of

one to nineteen building

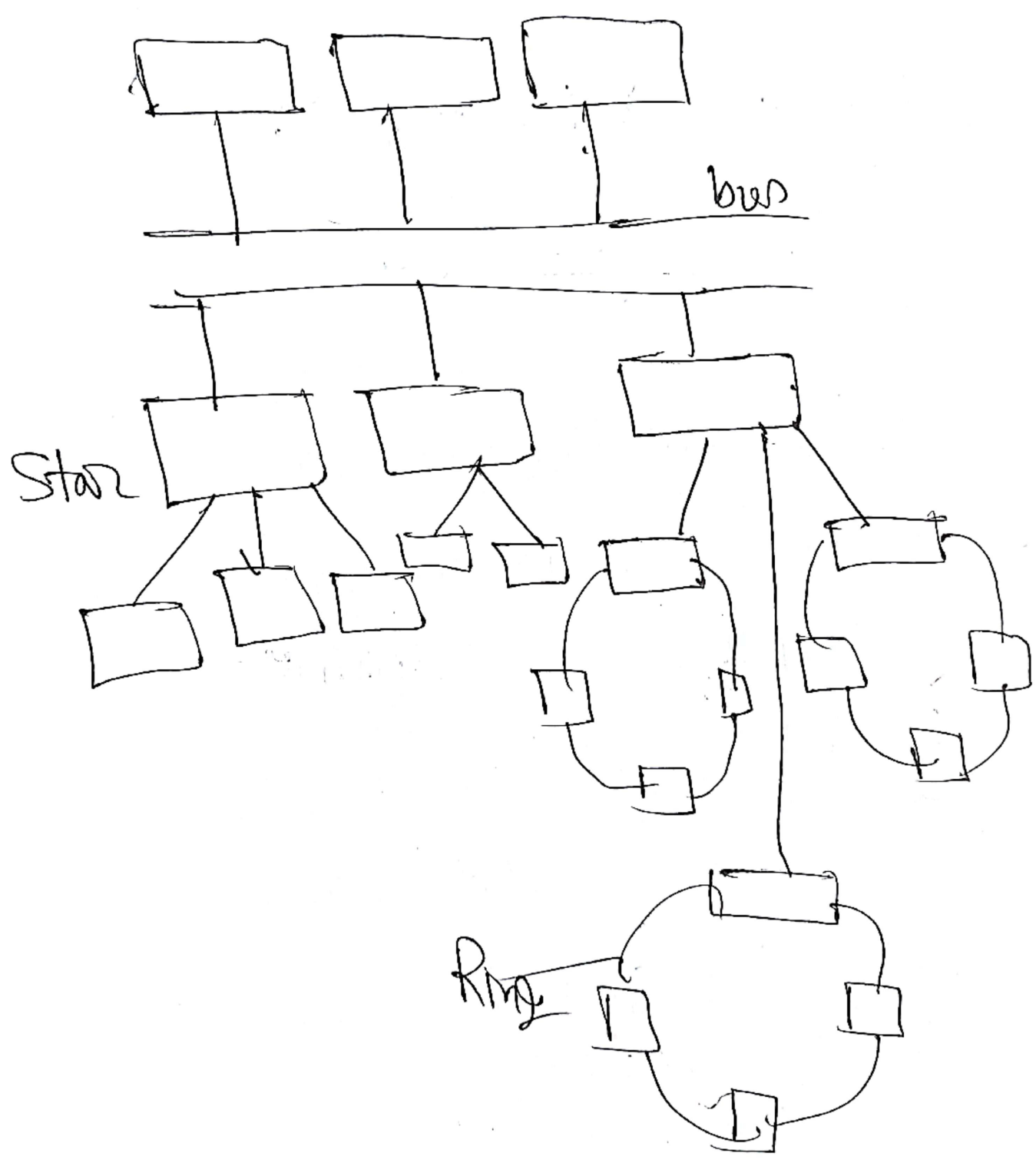
WAN \Rightarrow World Wide Network is the most appropriate network to send email from one country to another country. Because Arunima need a world wide network.

MAN: or Metropolitan ~~Inter~~ area network

means it range in a city.

So, it is ^{the} most appropriate for clothing stores located within a city are.

10b)



Answer to qn. 2

(a)

Given,

$$C = \frac{1}{2}$$

$$\text{bit rate} = 1500 \text{ kbps}$$

$$n = \frac{\text{No of data elements}}{\text{No of signal elements}}$$

$$= \frac{8}{4} = 2$$

$$\text{Band rate, } S = C \times N \times \frac{1}{n}$$

$$= \frac{1}{2} \times 1500000 \times \frac{1}{2}$$

$$= \frac{1500000}{4}$$

$$= 125000 \text{ Kbaud.}$$

Answer to Q.1

2a)

Data rate - Number of data elements transmitted per second

Signal rate → No. Number of signal transmitted per second

2 (b)

$$S_i = 1275 = 1275 \times 10^{-3} \text{ watt}$$

$$\begin{aligned} \text{Bandwidth} &= (10^9 - 999 \times 10^6) \text{ Hz} \\ &= 10^6 \text{ Hz} \\ &= 1 \text{ MHz} \end{aligned}$$

$$N_p = 5000 \times 10^{-6} \text{ watt}$$

$$\begin{aligned} \text{SNR} &= \frac{S_i}{N_p} = \frac{1275 \times 10^{-3}}{5000 \times 10^{-6}} \\ &= 255 \end{aligned}$$

$$\text{SNR} = 255,$$

$$\begin{aligned} \text{dB} = \text{SNR}_{\text{dB}} &= 10 \log_{10} 255 \\ &= 24.065 \text{ dB} \end{aligned}$$

$$\text{SNR} = [1.8 + 6n] \text{ dB}$$

$$24.06 \text{ dB} = 1.8 + 6n$$

$$n = \frac{22.26}{6}$$

$$= 3.7109$$

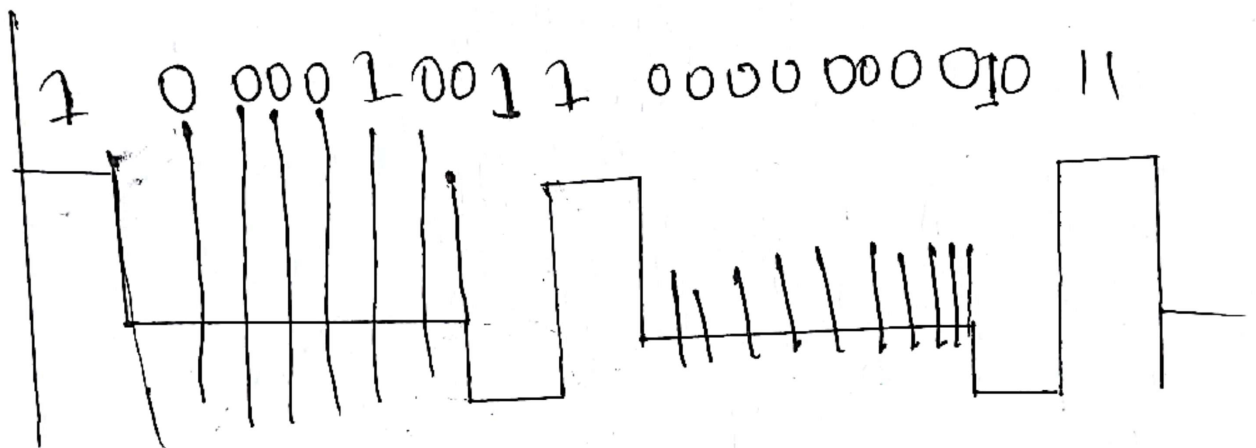
$$n = 4$$

$$\text{Signal} = 2^n = 2^4 = 16 \text{ Am})$$

2(b)

①

MLT-3



① B8ZS:

