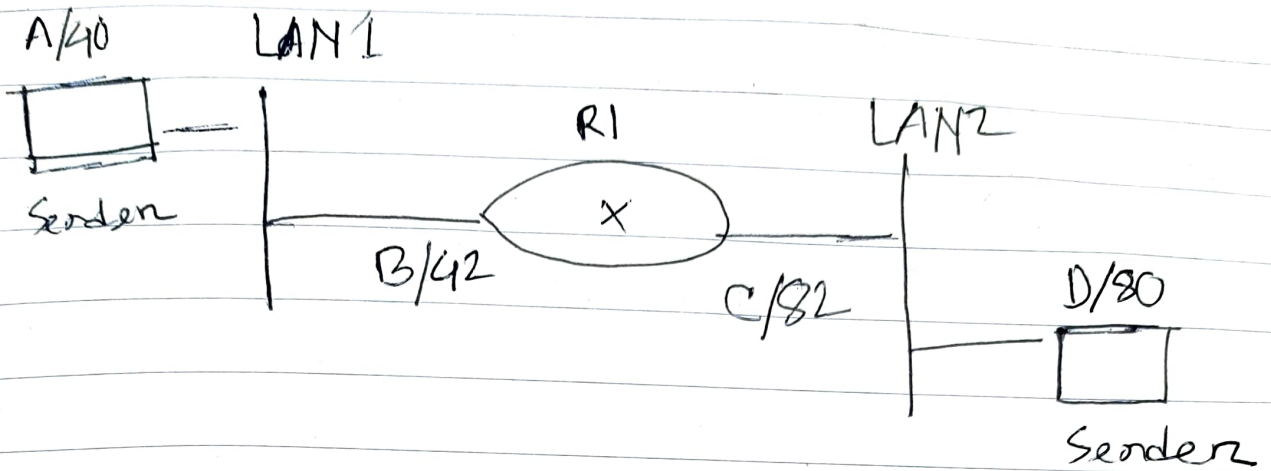


Day:

Date:

Ans to the Q - 01



42 40 AD X Y Data T<sub>2</sub>

80 82 AD X Y Data T<sub>2</sub>

Ans no - 2

$$\text{My } f_d = 143902031$$

$$\text{So, Bandwidth} = 1$$

Here

$$\text{Band width} = 1 \text{ kHz} = 1000 \text{ Hz}$$

$$\text{Signal power} = 20 \text{ W}$$

$$\text{Noise} = 6 \text{ mW} = 0.006 \text{ W}$$

We know

$$C = B \cdot \log_2 \left( 1 + \frac{S}{N} \right)$$

$$= 1000 \times \log_2 \left( 1 + \frac{20}{0.006} \right)$$

$$= 11703.18262 \text{ bits/sec}$$

*[Signature]*