

Solution Quiz#1(5B)

MCQ's

1. b
2. c
3. d

T/F

1. F
2. F

Q2.

Transmission rate of server = $R_s = 16 \text{ Mbps} = 16 * 10^6 \text{ bps}$

Transmission rate of access link = $R_c = 4 \text{ Mbps} = 4 * 10^6 \text{ bps}$

File size = $L = 200 \text{ million bits} = 200 * 10^6 \text{ bits}$

Transmission rate of bottleneck link (i.e., R_c) will be used for the purpose of delay calculation because

$\min(R_s, R_c)$ is R_c .

Time required to transfer the file =

$$L / R = L / R_c = 200 * 10^6 / 4 * 10^6 = 50 \text{ seconds}$$

Q3.

The through put will be 10mbps. The reason is that the through put is the minimum of all the transmission rate the occur inside its path. The minimum transmission rate is 10mbps so that will be the through put.