

Solution Quiz#1(5J)

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 = $L = 200 \text{ Mega bits} = 200 * 10^6 \text{ bits}$

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.

(a) Transmission Delay

(b) Propagation delay = $d/s = 1500 * 1000 / 2.5 \times 10^8 = 6 \text{ ms}$ (The question only asks for propagation delay.)