

SOLUTION QUIZ-01 BCS-6A

QUESTION-01

MCQs

- 1) A
- 2) A
- 3) C

TRUE/FALSE

1. False
2. True

QUESTION-02

(a) Transmission Delay = Size of Transfer / Link Bandwidth
 $= (500 \times 8) / (10 \times 10^6) = 4 \times 10^{-4} \text{ secs}$

(b) i. Ignore propagation, queuing, and processing delays

First Packet from Source Host to First Switch:

transmission Delay = $(250 \times 8) / (10 \times 10^6) = 2 \times 10^{-4} \text{ secs}$

Time at which 1st packet is received at the destination host = $2 \times 10^{-4} \times 2 = 4 \times 10^{-4} \text{ secs}$

After $(2 \times 10^{-4}) \text{ secs}$, 2nd Packet is Received at destination = $(4 \times 10^{-4}) + (2 \times 10^{-4}) = 6 \times 10^{-4} \text{ secs}$

ii. Throughput = $\min\{A-B, B-C\} = \min\{10\text{Mbps}, 2\text{Mbps}\} = \mathbf{2\text{Mbps}}$