Solution: SET-A

| S. No | Question | Solution |
|----------|--|----------|
| 1. | Q1: If selective repeat | D |
| | protocols use 6-bit | |
| | sequence numbers, what is | |
| | the maximum size of | |
| | receiver window? | |
| | a. 31 | |
| | b. 64 | |
| | c. 63 | |
| | d. None of these | |
| | | |
| 2. | Q4: Find the utilization | В |
| | percentage of the link using | |
| | stop and wait protocol. If | |
| | the bandwidth of the link is | |
| | 2MBps, and 1 bit takes 5 | |
| | miliseconds to make a round | |
| | trip. Size of each packet is | |
| | 8000 bits in length. a. 5 | |
| | b. 10 | |
| | c. 20 | |
| | d. None of These | |
| | | |
| 3. | Q5: Which of the following | D |
| | is false related to GO-Back- | |
| | N Protocol. | |
| | a. Three variables are used for define its | |
| | size and location at | |
| | any time for sender | |
| | side. | |
| | b. The send window | |
| | can slide one or more | |
| | slots when an error- | |
| | free ACK with | |
| | ackNo between Sf | |
| | and Sn | |
| | c. The | |
| | acknowledgment | |
| | number is | |
| | cumulative d. None of These | |
| | d. None of These | |
| | | |
| | | |
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| 4. | Q2: Deadlock problem in TCP can be solved by a. Retransmission time out b. Keepalive timer c. persistence timer d. None of These | С |
|----|--|------------|
| 5. | Q3: If the actual window size is 16, and window Window-scale-factor is 3, calculate the Window-scale-factor option in Hexadecimal. a. 040316 b. 030303 c. 040604 d. None of These | В |
| 6. | Q4: Timestamp option field can be used as: a. measures the round-trip time b. Calculate MSS c. prevents wraparound sequence numbers. d. None of These | A and C |
| 7. | Q5: Which of the following variant of TCP can solve the problem of multiple packet loss. a. TCP Reno b. TCP New Reno c. TCP SACK d. TCP FACK | B, C and D |
| 8. | Q6: Suppose a scenario of TCP-Reno, where cwnd= 8. Find the update window size after receiving 6 duplicate packets. a. 4 b. 9 | D |

| | c. 7 d. None of These | |
|-----|---|------------------|
| 9. | Q15: Value of rwnd = 4000 and cnwd = 3500 in a TCP connection. Sender already send two packets of 1000 bytes which has not been acknowledge. How many more bytes can be sent? | 1500 |
| 10. | Q 10: is the updated window size on changing state for Fast recovery to Congestion Avoidance state in TCP-Reno. | cwnd = threshold |