


**National University of Computer and Emerging Sciences, Lahore
Campus**

	Course Name:	Computer Networks	Course Code:	CS 3001
	Program:	BS (Computer Science)	Semester:	Spring 2025
	Duration:	15 minutes	Total Marks:	15
	Paper Date:	25-March-2025	Section	6C
	Exam Type:	Quiz 3 - Chapter 3	Page(s):	2

Student Name

Roll No.

Section:

Q1. Encircle the correct option:

[5 marks] [CLO 3]

1. Sequence number field in TCP segment consists of _____ bit(s).
 - a) 16
 - b) 32
 - c) 8
 - d) 1
2. User datagram protocol is called connectionless because:
 - a) All UDP packets are treated independently by transport layer.
 - b) No connection is made before the transfer of actual data
 - c) Both a & b
 - d) None
3. UDP provides
 - a) Flow Control
 - b) Congestion Control
 - c) Fast Delivery
 - d) None

True/False:

1. Flow Control: do not overwhelm the network. [T / F]
2. Multi-casting is possible in TCP. [T / F]

Question 2: Fill in the incomplete:

[4 Marks] [CLO 3]

<i>Properties</i>	<i>Stop and Wait</i>	<i>GO BACK N</i>	<i>SELECTIVE REPEAT</i>
Sender Window Size	1		
Receiver Window Size			N

Question 3. Host A and B are communicating over a TCP connection, and Host B has already received from A all bytes up through byte 126. Suppose Host A then sends two segments to Host B back-to-back. The first and second segments contain 80 and 40 bytes of data, respectively. In the first segment, the sequence number is 127, the source port number is 302, and the destination port number is 80. Host B sends an acknowledgment whenever it receives a segment from Host A. **[3 + 3 Marks] [CLO 3]**

(a) What is the sequence number and destination port number in the second segment sent from Host A to B?

(b) If the first segment arrives before the second segment, then, in the acknowledgment of the first arriving segment by host B to A, what will be the acknowledgment number and the destination port number?