


National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Computer Networks	Course Code:	CS 3001
	Program:	BS (Computer Science)	Semester:	Fall 2022
	Duration:	20 minutes	Total Marks:	15
	Paper Date:	08-Nov-2022	Section	5A
	Exam Type:	Quiz 4 - Chapter 4	Page(s):	2

Student Name

Roll No.

Section:

Q1. Encircle the correct option:

[5 marks]

1. The IP version 4 address has _____ bits
 - a) 4
 - b) 32
 - c) 128
 - d) 24
2. A best-effort delivery service such as IPv4 include:
 - a) Error checking
 - b) Error Correction
 - c) Datagram Acknowledgment
 - d) None of the above
3. Network ID and a subnet ID
 - a) can never be the same
 - b) can be same
 - c) are always the same.
 - d) None of the above

True/False:

1. DHCP Request is optional msg. [T / F]
2. All the datagram is lost in case of loss of a single fragment. [T / F]

Q2. An organization is granted a block with one of the IP addresses as 200.0.80.0/22. The administrator wants to create 4 subnets with following requirements: 1st subnet needs at least 300 IP addresses, 2nd subnet needs at least 200 IP addresses, 3rd subnet needs at least 100 IP addresses while 4th subnet needs at least 120 IP addresses. You are required to find :

(i) the subnet mask for each subnet, **(ii)** 1st and last IP address in each subnet, **(iii)** number of addresses in each subnet, and **(iv)** range of valid host addresses in each subnet.

[2.5*4 = 10 Marks]