


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

	Course Name:	Computer Networks	Course Code:	CS 3001
	Program:	BS (Software Engineering)	Semester:	Spring 2025
	Duration:	15 minutes	Total Marks:	15
	Paper Date:	08-April-2025	Section	6C
	Exam Type:	Quiz 4 - Chapter 4	Page(s):	2

Student Name

Roll No.

Section:

Q1. Encircle the correct option:

[5 marks] [CLO 3]

1. The key function of the Network Layer's data plane is
 - a) Error and Diagnostic Functions
 - b) Routing Algorithms
 - c) Routing / network wide logic
 - d) Forwarding / local per router function

2. Match the classes of IP addresses with their functional applications
 - Class A ----- i) Multicast services
 - Class B ----- ii) Reserved for future use
 - Class D ----- iii) Large organizations
 - Class E ----- iv) Midsize Organizations.

3. The preferred approach taken for the transitioning from IPv4 to IPv6 is
 - a) Flag days
 - b) tunneling
 - c) dual stack approach
 - d) Transitioning not started

True/False:

- I. The value in the header length field of IPv4 header is scaled by a factor of 2. [T / F]
- II. The IP version 4 address consist of 4 octets. [T / F]

Question 2:**[Marks 10] [CLO 3]**

Consider a subnet with prefix 128.119.40.128/26. Give an example of one IP address (of form xxx.xxx.xxx.xxx) that can be assigned to this network. Suppose an ISP owns the block of addresses of the form 128.119.40.64/26. Suppose it wants to create four subnets from this block, with each block having the same number of IP addresses. What are the prefixes (of form a.b.c.d/x) for the four subnets? (Note: All answers should be in dotted decimal notation.)