National University of Computer and Emerging Sciences, Lahore Campus

THE STATE OF THE S	Course Name:	Computer Networks	Course Code:	CS 3001
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	Paper Date:	20-February-2025	Section	6C
	Exam Type:	Quiz 2 - Chapter 2	Page(s):	2

Student Name Roll No. Section:

Q1. Encircle the correct option:

[6 marks] [CLO 2]

- 1. The protocol commonly responsible for sending emails from a client to a server is:
 - A. IMAP
 - B. SMTP
 - C. POP3
 - D. HTTP
- 2. What is the main difference between recursive and iterative DNS queries?
 - A. Recursive queries minimize the burden on the client, while iterative queries burden the TLD server.
 - B. Recursive queries minimize the burden on TLD servers, while iterative queries require multiple requests by the client.
 - C. Recursive queries are faster than iterative queries.
 - D. There is no difference.
- 3. Which HTTP version introduced pipelining to improve efficiency?
 - A. HTTP/0.9
 - B. HTTP/1.0
 - C. HTTP/1.1
 - D. HTTP/2
- 4. What happens when a local DNS cache entry expires?
 - A. The query is redirected to the root server.
 - B. The DNS query fails permanently.
 - C. The resolver must query higher-level DNS servers to refresh the record.
 - D. The cache entry is automatically renewed.

True/False:

- i. DNS uses TCP for queries that exceed 512 bytes. [T/F]
- ii. Non-persistent HTTP establishes a new TCP connection for every request-response pair. [T / F]

Elaborate the difference between Recursive and Iterative DNS query with help of the figures below,

NOTE: Draw arrow lines showing messages between the requesting host/ DNS servers (& vice versa) to complete a DNS query/ response sequence. Furthermore, number each line to show the communication sequence.

