



RAN-2511001005055001

T.Y.B.Sc. Computer Science (NCF-NEP) (Sem. - V) Examination March - 2026 Minor-2-CS-502 : Computer Network (Paper - 502)

Time: 2 Hours]

[Total Marks: 50

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book	Seat No.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

Q. 1. (A) Answer the followings.

05

- In _____ mode, each station can both, transmit and receive, but not at the same time.
 - Simplex
 - half duplex
 - duplex
 - none of these
- Identify the switching method in which the message is divided into small packets.
 - Virtual switching
 - Packet switching
 - Message switching
 - None of the above
- What is a man-in-the-middle (MITM) attack?
 - Locking a user's data for ransom
 - Flooding a server with requests
 - Intercepting communication between two parties
 - Guessing a user's password
- Identify the full form of HTTP?
 - Hyper Text Transfer Protocol
 - Hyper Text Transfer Package
 - Hyper Transfer Text Package
 - Hyper Transfer Text Protocol
- An IP address is _____ bits long.
 - 8
 - 32
 - 24
 - None of the above

(B) Answer the followings in short. (Any Four)

08

- Define multiplexing. List out various multiplexing techniques.
- What do you mean by API call?
- What is the use of ARP?
- HTTP is known as stateless protocol. Justify it.
- Write advantages of IMAP

- Q. 2. Answer the following questions in detail. 08**
- (A) Write a note on OSI model. Explain Datalink, transport and Presentation layer in detail with their functions.
- OR**
- (A) Explain P2P network with its benefits and limitations. Compare its working with client-server network. Which is more secure? Also discuss hybrid network in detail. 08
- (B) Write a detailed note on FTP. 05
- Q. 3. Answer the followings in detail. (Any Two) 12**
- (A) Write a note on twisted pair cable with their pros and cons.
- (B) Discuss IDS and IPS in detail.
- (C) Write a note on data compression in detail. Also compare lossless and lossy compression.
- Q.4. Answer the followings in detail. (Any Two) 12**
- (A) Write a note on Tree topology with their importance.
- (B) What do you mean by DNS query? Explain various types of DNS queries in detail.
- (C) Write a detailed note on software defined networking.
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