

[Dashboard](#) / [Courses](#) / [Autumn 2024-25](#) / [B.Tech Semester 5](#) / [CS301 2024](#) / [General](#) / [QUIZ2 29.11.2024 2.30 To 2.50 PM](#)

Started on Friday, 29 November 2024, 2:46 PM

State Finished

Completed on Friday, 29 November 2024, 2:52 PM

Time taken 5 mins 6 secs

Question **1**

Complete

Marked out of
1.00

What type of error control is used in Selective Repeat ARQ?

- ☐ a. Positive acknowledgment.
- ☐ b. Negative acknowledgment
- ☒ c. Both Positive and Negative acknowledgment
- ☐ d. None of these

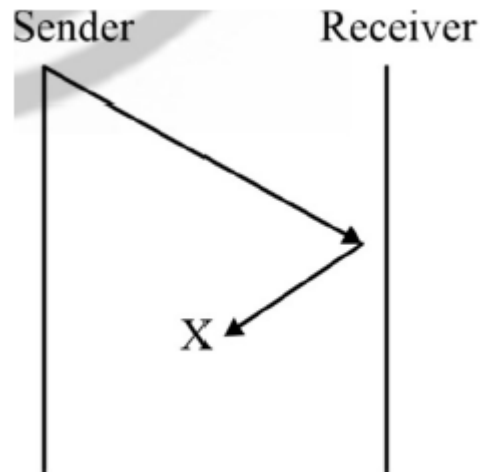
Question **2**

Complete

Marked out of
1.00

Consider the following diagram:

Among the problems in the stop-and-wait protocol, which of the following problems is represented by the given diagram?



- ☐ a. Delayed Data
- ☐ b. Delayed Acknowledgement
- ☒ c. Lost Acknowledgement
- ☐ d. Lost Data

Question **3**

Complete

Marked out of
1.00

The primary function of the ARP protocol is to:

- ☒ a. Resolve IP addresses to MAC addresses.
- ☐ b. Resolve domain names to IP addresses.
- ☐ c. Identify network topology.
- ☐ d. Establish connections in TCP.

Question **4**

Complete

Marked out of
1.00

In an Ethernet frame, the preamble is used for:

- ☐ a. Error detection
- ☐ b. Encapsulation.
- ☒ c. Synchronizing communication
- ☐ d. Address resolution.

Question **5**

Complete

Marked out of
1.00

A switch and router operates at which layers of the OSI model?

- ☐ a. Network and Transport layer
- ☐ b. Physical and Transport layer
- ☒ c. Data Link and Network layer
- ☐ d. Physical and Network layer

Question **6**

Complete

Marked out of
1.00

What is the purpose of the sliding window protocol in computer networks?

- ☒ a. To ensure flow control and error control.
- ☐ b. To detect congestion in the network.
- ☐ c. To allocate IP addresses dynamically.
- ☐ d. To minimize the delay in packet switching.

Question **7**

Complete

Marked out of
1.00

NAT translates:

- ☐ a. Public IP addresses to private IP addresses.
- ☐ b. IPv4 addresses to IPv6 addresses.
- ☒ c. Both Private IP addresses to public IP addresses and Public IP addresses to private IP addresses.
- ☐ d. Private IP addresses to public IP addresses.

Question **8**

Complete

Marked out of
1.00

Selective Repeat ARQ improves efficiency by:

- ☐ a. Limiting the window size to 1 frame.
- ☐ b. Avoiding the use of acknowledgments.
- ☒ c. Resending only the erroneous or lost frames.
- ☐ d. Increasing the transmission rate.

Question **9**

Complete

Marked out of
1.00

Which of the following IP address cannot be assigned to any host?

- ☐ a. None of these
- ☒ b. Both 127.10.15.243 & 129.46.255.255
- ☐ c. 129.46.255.255
- ☐ d. 127.10.15.243

Question **10**

Complete

Marked out of
1.00

The range of IPv4 addresses in Class C is:

- ☐ a. 1.0.0.0 to 127.255.255.255
- ☒ b. 192.0.0.0 to 223.255.255.255
- ☐ c. 128.0.0.0 to 191.255.255.255
- ☐ d. 128.0.0.0 to 191.255.255.255

Question **11**

Not answered

Marked out of
1.00

In ARQ protocols, an acknowledgment:

- ☐ a. Can replace retransmission.
- ☐ b. Indicates the successful reception of data.
- ☐ c. Is sent only for lost packets.
- ☐ d. Is used only in Stop-and-Wait ARQ.

Question **12**

Not answered

Marked out of
1.00

How many bits are used in an IPv6 address?

- ☐ a. 128 bits
- ☐ b. 48 bits
- ☐ c. 64 bits
- ☐ d. 32 bits

Question **13**

Not answered

Marked out of
1.00

If the maximum sequence number in Go-Back-N ARQ is 'S,' what will be the receiver window size?

- ☐ a. 1
- ☐ b. S
- ☐ c. $\frac{S+1}{2}$
- ☐ d. $S + 1$

Question **14**

Not answered

Marked out of
1.00

In CSMA, which parameter determines the delay before a device retransmits?

- ☐ a. Persistence level.
- ☐ b. Backoff time.
- ☐ c. Channel length.
- ☐ d. Window size.

Question **15**

Not answered

Marked out of
1.00

In Ethernet, the maximum size of a frame (excluding the preamble) is:

- ☐ a. 1540 bytes
- ☐ b. 1518 bytes
- ☐ c. 1522 bytes
- ☐ d. 1500 bytes

Question **16**

Not answered

Marked out of
1.00

Which of the following is a private IP address?

- ☐ a. 172.217.160.1
- ☐ b. 203.0.113.1
- ☐ c. 8.8.8.8
- ☐ d. 192.168.1.1

Question **17**

Not answered

Marked out of
1.00

PAT differs from NAT by:

- ☐ a. Limiting the number of private addresses.
- ☐ b. Mapping a single IP address to multiple ports.
- ☐ c. Translating only IPv6 addresses.
- ☐ d. Allowing only one public address.

Question **18**

Not answered

Marked out of
1.00

CSMA/CD is used in:

- ☐ a. Optical fiber networks
- ☐ b. Ethernet networks
- ☐ c. Wireless networks
- ☐ d. Cellular networks

Question **19**

Not answered

Marked out of
1.00

Which of the following is true about the Stop-and-Wait ARQ protocol?

- ☐ a. It requires the sender to wait for an acknowledgment before sending the next frame.
- ☐ b. It uses a sliding window mechanism.
- ☐ c. It does not require acknowledgments.
- ☐ d. It is used in noiseless channels.

Question **20**

Not answered

Marked out of
1.00

In Go-Back-N ARQ, if a frame is lost:

- ☐ a. The receiver requests retransmission of all frames.
- ☐ b. Only the lost frame is retransmitted.
- ☐ c. No retransmission is performed.
- ☐ d. All frames after the lost frame are retransmitted.

[Announcements ►](#)