1.In Go-Back-N ARQ, if 5 is the number of bits for the sequence number, then the maximum size of the receive window must be \_\_\_\_\_\_\_.

A)   1

B)   15

C)   16

D)   31

2. In Go-Back-N ARQ, if frames 4, 5, and 6 are received successfully, the receiver may send an ACK \_\_\_\_\_\_\_ to the sender.

A)   6

B)   7

C)   5

D) 8

3. The Stop-And-Wait ARQ, Go-Back-N ARQ, and the Selective Repeat ARQ are for \_\_\_\_\_\_ channels.

A)   noiseless

B)   noisy

C)   restful state

D)   stateless

4. The \_\_\_\_\_\_\_\_\_Protocol, adds a simple error control mechanism to the \_\_\_\_\_\_\_Protocol.

A)   Selective Repeat ARQ; Go-Back-N ARQ

B)   Go-Back-N ARQ; Stop-and-Wait

C)   Stop-and-Wait ARQ; Stop-and-Wait

D)   none of the above

5. In PPP, the \_\_\_\_\_\_\_\_ is responsible for establishing, maintaining, configuring, and terminating links.

A)   PAP

B)   CHAP

C)   LCP

D)   NCP

6. In Selective Repeat ARQ, if 5 is the number of bits for the sequence number, then the maximum size of the receive window must be \_\_\_\_\_.

A)   1

B)   15

C)   16

D)   31

7. In Go-Back-N ARQ, if 5 is the number of bits for the sequence number, then the maximum size of the send window must be \_\_\_\_\_.

A)   1

B)   15

C)   16

D)   31

8. \_\_\_\_\_\_\_ control refers to a set of procedures used to restrict the amount of data that the sender can send before waiting for acknowledgment.

A)   Flow

B)   Error

C)   Transmission

D)   none of the above

9.In \_\_\_\_\_\_\_\_ framing, we need a delimiter (flag) to define the boundary of two frames.

A)   standard

B)   fixed-size

C)   variable-size

D)   none of the above

10.In \_\_\_\_\_\_\_\_\_ protocols, we use \_\_\_\_\_\_\_\_.

A)   bit-oriented; character stuffing

B)   bit-oriented; bit stuffing

C)   character-oriented; byte stuffing

D) bit oriented, character stuffing

11.Which is a unit of data transmission

A)Frame

B)Stop and wait ARQ

C)HDLC

D)Frame relay

12. A special eight-bit sequence \_\_\_\_\_\_\_\_ is referred to as a flag

A)01111111

B)01111110

C)11101110

D)11101110

13)  \_\_\_\_\_\_\_ in the data link layer separates a message from one source to a destination, or from other messages going from other sources to other destinations.

A)   Controlling

B)   Framing

C)   Digitizing

D)   Quantising

14) In the \_\_\_\_\_ Protocol, the sender sends one frame, stops until it receives confirmation from the receiver, and then sends the next frame.

A)   Simplest

B)   Stop-and-Wait

C)   Selective-Repeat ARQ

D)   Go-Back-N ARQ

15) The \_\_\_\_\_\_\_Protocol has flow control, but not error control.

A)   Selective-Repeat ARQ

B)   Stop-and-Wait

C)   Simplest

D)   Go-Back-N ARQ