60. Sliding Window Protocol

Flow Control Protocols –

1. Noiseless Channels-

- Simplest

- Stop and Wait

1. Noise Channels –

- Stop and wait ARQ

- Go back N ARQ

- Selective repeat ARQ

Sliding window Protocol -

- Firstly, the data bits are arranged in a left to right in terms of priority

10 9 8 7 6 5 4 3 2 1 0

- In the Sliding window protocol, the main parameter, Window Length determines how many bits can

be sent to the receiver without having an acknowledgement.

- The main advantage of the sliding window protocol is that the first n number of data bits are sent

according to the count of the Window length and not just 1.

- For example, if the window’s length is 4 bits, the 4 bits are transmitted to the receiver.Let’s keep the sliding window from 0 to 3.

- When the receiver processes the first bit that is 0, the acknowledgement is sent to the sender and the next bit is ready to be transmitted.

- When the next bit is transmitted, the sliding window changes the position from 0 to3 to the latest

position 1 to 4.

- As the numbers of acknowledgements are received, by the sender, it releases a greater number of bits, and the sliding windows shits one bit at a time, as the ack are received.

- Since this Process carries a window from a set of bits from one point to another, it is known as the

Sliding Window Protocol.

