HTTP Assignment E/20/280

① ⓐ Reliable transmission
A transmission which ensure data deliver from a source to a destination without any loss, corruptions or duplications.
TCP (transmission control protocol) does provides reliable transmission using Acks and sequence numbering

ⓑ flow control
The controlling method which prevent the send or devices from sending overwhelming amount of data (reciver cannot process fastenough)
TCP does provide this with the sliding window site.

ⓒ congestion control
This ensure the network does not become ororload and loos packets

② Packet loss : packet may drop due to congestions in the network
out of order : packets may arrive in wrong order.
Duplications : duplications of the same packet might arrive.
Bit errors : bit flips during transmission due to noise.
Delay : packets may take longer than allowed by the system, which leads to packet loss.

③ Sequence numbers : helps if outoforder packets reaives
Acknowladement (Ack): confirms the delivery of a packet
checksum : check if the packet is errornious or corrupted
Retransmission : re-transmit same packet, if Ack is not recived to ensure delivery.

④ UDP does not have reliable transmission. ~~the refore~~ therefore
does not have ~~many~~ error correction ~~detection~~ mechanisms
as TCP. ~~here are few available in UDP~~
only have error detection, using check sum.
therefore only neglect error packets and keep faster communication.
However, error corrections can be applied at application layer.