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Subject: Advance Computer Network
Code: 10M11CI112

Dated:
Max. Marks: 15

All Questions are compulsory and carrying equal marks.

Q. 1 a) Differentiate among Limited Broadcasting and Directed Broadcasting. [1*5=5]

b) The data link layer takes the packets from _____ and encapsulates them into _____ for transmission.

c) Write down the efficiency of Pure ALOHA and slotted ALOHA.

d) What's Flow control? List the strategy to control it.

e) Define IOT architecture.

Q 2 a) Differentiate among Stop and wait and sliding window protocol. [2*2=4]

b) In Go–back 3 flow control protocol every 6th packet is lost. If we have to send 11 packets. How many transmissions will be needed ?

Q 3 a) Given a Network address 160.150.0.0/25. Find the following : [3*2=6]

i) Default Subnet mask ii) Custom subnet mask

iii) Total no. of subnets iv) Total no. of Host addresses

v) Number of Usable addresses vi) Number of bits borrowed

b) Consider a selective repeat sliding window protocol that uses a frame size of 1 KB to send data on a 1.5 Mbps link with a one-way latency of 50 msec. To achieve a link utilization of 60%, the minimum number of bits required to represent the sequence number field is what?