COMP 362 Computer Networks II: Quiz I

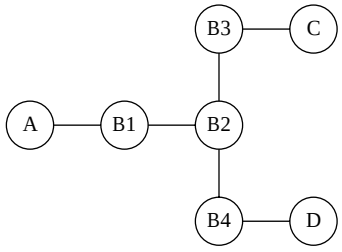
September 25, 2001

Name …….. Student id: …….. Email: …….. Lab: ……

Answer all questions.
No documents allowed.
Duration 30 mn.

Question 1:

Consider the following extended network that uses 4 learning bridges:



Assuming all forwarding tables are initially empty, give the forwarding tables for each of the bridges B1 to B4, after the following transmissions occur (in this order):

A sends to C
C sends to A
D sends to C.

The interfaces are identified by the name of the unique neighbor reached through them. For example B1's interfaces are named A and B2.

Your answer here:

B1

Host	Next hop

B2

Host	Next hop

B3

Host	Next hop

B4

Host	Next hop

Question 2: (justify your answers don't just give the result)

Consider a LAN with a maximum distance of 2 Km.
a- At what bandwidth would the transmission delay of a 100 bytes packet equal the propagation delay at a speed of 2×10^8 m/s
b- Same question for a packet of 512 bytes.

Your answers here:

Question 3: Circle the correct answer in any color but red (-0.5 for each wrong answer, 1 for each correct answer, 0 if not answered)

a)	10.121.22.1 is a Class A IP address	True	False
b)	143.89.88.90 is a Class C IP address	True	False
c)	203.89.88.90 is a Class B IP address	True	False
d)	The DF bit in the IP header indicates the last fragment of an IP packet	True	False
e)	The header length field in the IP header is counted in bytes	True	False
f)	IP is the transport layer protocol in the TCP/IP architecture	True	False
g)	IP is a connection oriented protocol	True	False
h)	A router that receives fragments of the same IP datagram reassembles them before forwarding them to the next hop router or host	True	False
i)	The TTL field indicates how long the datagram can transit in the network before it is destroyed	True	False
j)	The TTL field is incremented by 1 by each router crossed by the datagram	True	False
k)	Sliding window achieves higher throughput than Stop and wait	True	False
l)	In stop and wait no more than one data frame can be sent each RTT	True	False
m)	Packet switching uses bandwidth efficiently than circuit switching for bursty data transfers	True	False