

ITS 323 – QUIZ 6 (CSA)

First name: _____ Last name: _____

ID: _____

Total Marks: _____

out of 10

Question 1 [3 marks]

Assume Classful Addressing is used.

- a) Computer A has IP address 129.64.32.8. What class is it? _____
- b) What IP address identifies the network of Computer A? _____
- c) Is the computer with the following IP address on the same network as A? YES / NO
10000001 01000000 00000001 00000000

Question 2 [3 marks]

Assume Classless Addressing is used.

- a) What subnet mask should be used to create the same network size as that of Computer A in Question 1?

- b) Computer C has IP address 72.45.8.16. What is the network address for this computer if the subnet mask is 255.255.128.0?

- c) What is the broadcast address for computer C with subnet mask 255.255.128.0?

Question 3 [3 marks]

Multiple choice (circle the correct answer):

- a) Which protocol provides error reporting capabilities in the Internet:
- i. ICMP
 - ii. ARP
 - iii. IP
 - iv. UDP
- b) For a network with a maximum of 1100 hosts, which subnet mask is most appropriate?
- i. /9
 - ii. /23
 - iii. /21
 - iv. /11
- c) The purpose of the Protocol Number field in the IP header is:
- i. Indicate the next higher layer protocol that the data is intended for
 - ii. Indicate the version of IP being used
 - iii. Indicate the lower layer (data link) protocol that the data is intended for
 - iv. Indicate the protocol options used by IP
- d) For an IP datagram with destination address 150.102.12.10/24 at a router with the following routing table, what next router will the datagram be sent to:

Destination Network	Next Router
150.102.7.* /24	A
150.102.*.* /24	B
150.*.7.10/24	C
*	D

- i. A
- ii. B
- iii. C
- iv. D