

ITS 323 – QUIZ 6 (ITA)

First name: _____ Last name: _____

ID: _____

Total Marks: _____

out of 10

Question 1 [4 marks]

Assume Classful Addressing is used.

- Computer A has IP address 17.203.64.12. What class is it? _____
- Computer B has IP address 17.204.64.12. Are A and B on the same network? YES / NO
- What IP address identifies the network of Computer A? _____
- Is the computer with the following IP address on the same network as A? YES / NO
00010001 11010011 01010000 00000000

Question 2 [3 marks]

Assume Classless Addressing is used.

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

- Computer C has IP address 64.33.8.3. What is the network address for this computer if the subnet mask is 255.255.192.0?

- What is the broadcast address for computer C with subnet mask 255.255.192.0?

Question 3 [3 marks]

Multiple choice (circle the correct answer):

- a) Which protocol maps IP addresses into physical address (like IEEE MAC addresses):
- i. ICMP
 - ii. ARP
 - iii. DNS
 - iv. IP
- b) For a network with a maximum of 1000 hosts, which subnet mask is most appropriate?
- i. /18
 - ii. /22
 - iii. /24
 - iv. /10
- c) 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.*.7.10/24	B
150.102.*.* /24	C
*	D

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