

## ITS 323 – QUIZ 7 (CSB ANSWERS)

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

ID: \_\_\_\_\_

Total Marks: \_\_\_\_\_

out of 10

### Question 1 [2 marks]

Match the address/identifier types to their correct meaning (write either the letter or the full name). You can select from the following address/identifier types:

- a. Port number
- b. Hardware address
- c. Protocol number
- d. Domain name
- e. IP address

_____	Physical addresses specific to a LAN or WAN technology
_____	User-friendly identifiers for IP interfaces
_____	Logical addresses identifying a network interface
_____	Identify the transport protocol

### Answers

Port number: Identify application protocols

Hardware address: Physical addresses specific to a LAN or WAN technology

Protocol number: Identify the transport protocol

Domain name: User-friendly identifiers for IP interfaces

IP address: Logical addresses identifying a network interface

### Question 2 [ marks]

True or false:

- |   |       |
|---|-------|
| a) UDP provides a full duplex connection.                 | T / F |
| b) DNS maps domain names to IP addresses                  | T / F |
| c) Two protocols used in email transfer are IMAP and SNMP | T / F |

### Answers

False – UDP does not use connections

True.

False – SNMP is Simple Network Management Protocol, not for email.

**Question 3** [2 marks]

List the four addresses that identify a unique TCP connection:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Answer**

Source port number

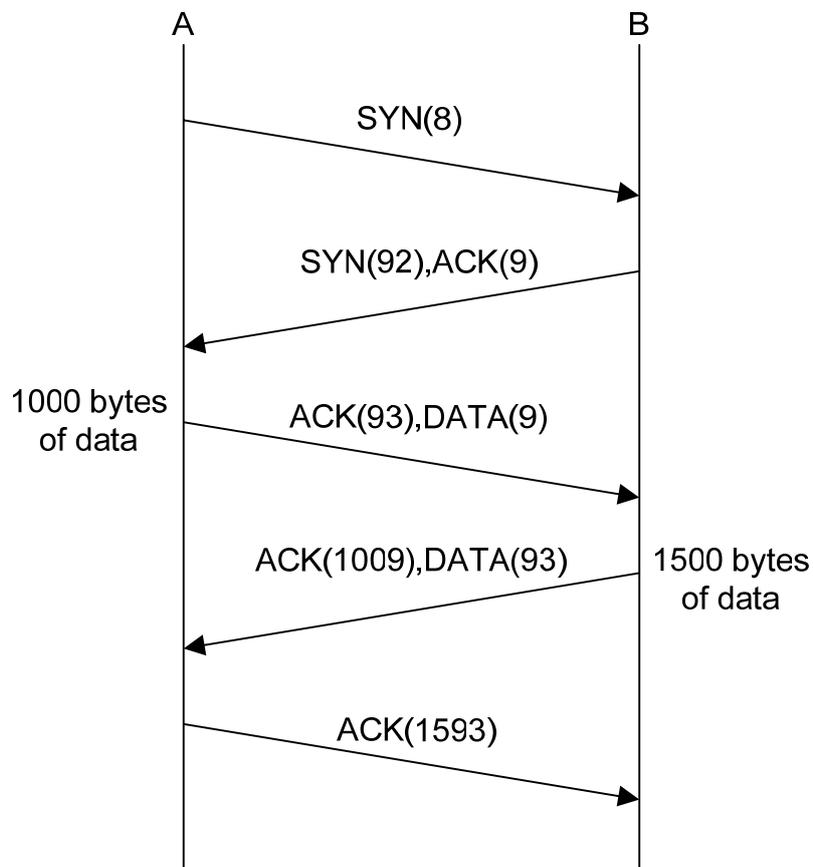
Destination port number

Source IP address

Destination IP address

**Question 4** [3 marks]

Complete the missing parts in the figure below which shows TCP connection setup between A and B, as well as data transferred from A to B (1000 bytes) and from B to A (1500 bytes). The format of messages is as follows: Type(Number), and of course some segments may have multiple types.

**Answer**

**Bonus Questions** (marks from these questions are added to your overall quiz score from the five best quizzes; each part is worth 1 mark)

- a) What is the broadcast address for the classless IP address 160.14.12.8/25?

Broadcast address: \_\_\_\_\_

- b) What subnet mask should be used to create a network with a maximum of 62 hosts?

Subnet mask: \_\_\_\_\_

- c) Name the LAN MAC protocol that is similar in concept to Statistical TDM

MAC protocol: \_\_\_\_\_

- d) Name the routing strategy where a router randomly selects a link to transmit a packet on.

Strategy: \_\_\_\_\_

- e) What is the network address for the classful IP address 190.3.254.16?

Network address: \_\_\_\_\_

### Answers

a. 160.14.12.127

b. 6 bits gives  $2^6$  possible values, minus two special addresses gives 62 hosts. Hence the network portion of the address must be 26 bits and the host portion 6 bits. The subnet mask is /26.

c. Reservation MAC: users reserve slots in the future, and are allocated slots based on demand

d. Random Routing.

e. Class B address, hence network address is 190.3.0.0