ITS 323 – Quiz 7 (CSb)

First name: _____   Last name: _____

ID: _____   Total Marks: _____

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

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

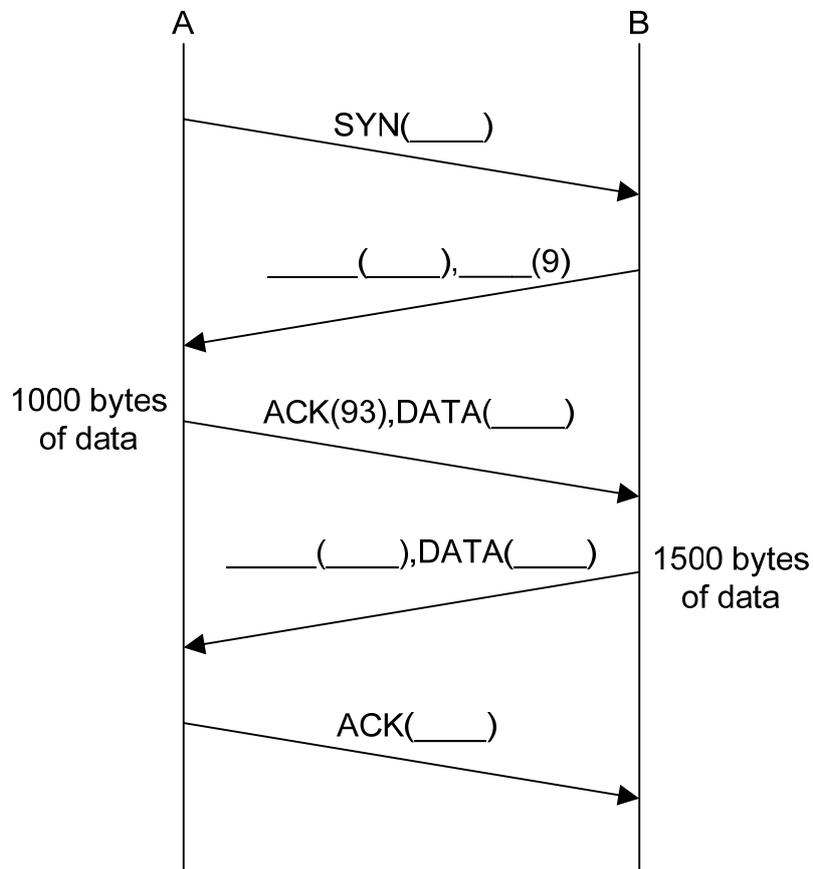   c) Two protocols used in email transfer are IMAP and SNMP   T / F

Question 3 [2 marks]

List the four addresses that identify a unique TCP connection:

     1. _____

     2. _____

     3. _____

     4. _____

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.

A   B

SYN(____)

____(____),____(9)

1000 bytes
of data

ACK(93),DATA(____)

____(____),DATA(____)   1500 bytes
of data

ACK(____)

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: _____