

ITS323 – Quiz 7

Name: _____

ID: _____

Mark: _____ (out of 10)

Question 1 [4 marks]

Consider two hosts with the following properties:

- Client
 - IP: 64.32.16.1 Application port: 12456 Initial Sequence Number (ISN): 96
- Server
 - IP: 22.33.44.1 Application port: 205 Initial Sequence Number (ISN): 123

The 1st column in the table below gives the names of selected fields in a TCP segment. The 2nd column gives the length of the field (in bits). Answer the following questions by writing the field values in the table. If the field value is not relevant, then write a cross 'X' in the table.

Consider TCP connection establishment. What are the field values for:

- a) 2nd TCP segment sent in the connection establishment

Assume the connection establishment was successful. What are the field values for:

- b) 1st TCP segment sent by server that contains data (the data is 3000B)

| Field | Size (bits) | (a) | (b) |
|-----------------|-------------|-----|-----|
| Source port | 16 | | |
| Dest. port | 16 | | |
| Sequence number | 32 | | |
| Ack. number | 32 | | |
| SYN flag | 1 | | |
| ACK flag | 1 | | |

