ITS323 – Quiz 6

Name: _____

ID: _____ Mark: _____ (out of 5)

Question 1 [2 marks]

In an internet, three types of fragmentation (and re-assembly) are possible

Type 1: Fragment at source, re-assemble at destination

Type 2: Fragment at source and routers, re-assemble at destination

Type 3: Fragment at source and routers, re-assemble at routers and destination

Consider the path as shown below, where the maximum frame size (in Bytes) for each link is shown.

A ←— 1500 —→ B ←— 1000 —→ C ←— 500 —→ D ←— 2000 —→ E

If Type 3 fragmentation and re-assembly is used, list the fragments that would be sent over the 2nd link (from B to C) if source A had 4000 Bytes of data to send to destination E. For each fragment, indicate its size.

Question 2 [2 marks]

The two special cases addresses (directed broadcast and network) are not allowed to assigned to interfaces of hosts or routers. Assume a router on a LAN has IP address 160.203.156.23. What is the maximum number of IP hosts that can be attached to the same LAN as the router? Explain your answer.

Question 3 [1 mark]

Explain the main difference between a host and a router?