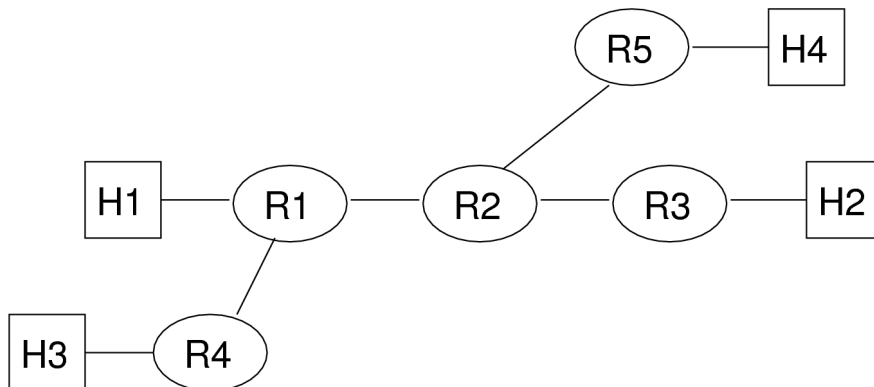# CSS322 – Quiz 7

Name: _____

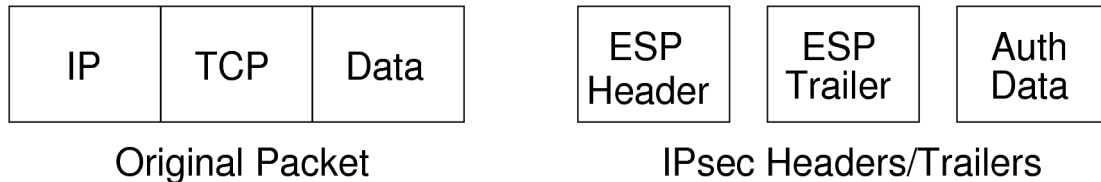ID: _____   Mark: _____ (out of 6)

Question 1 [6 marks]

Consider the IP network shown below.

A source host has an original IP packet, shown below, to send to a destination host. The figure below also shows the set of IPsec headers/trailers that are available when using Encapsularing Security Payload (ESP) with both confidentiality and authentication.

In your answers you can use the host and router names as the IP addresses. For example, the IP addres of host H1 is: H1. Consider that host H3 has the original IP packet to send to H4.

a) If ESP tunnelling mode is used from R1 to R5, draw the IP packet sent by R2. [3 marks]

b) List the parts of the above packet that are encrypted. [1 mark]

c) What is the destination IP address in the outer header of the above packet? [1 mark]

d) What is an advantage of tunnelling mode (instead of transport mode) in ESP? [1 mark]