



4.9.4.1 TCP IP

1) A company is setting up a website and an online file-sharing service. Users will access the website through a web browser and upload/download files from the server.

a) State the names of **two-application layer** protocols that the server must implement and explain what each will be used for.

[4 marks]

2) Explain how the **transport layer** of the TCP/IP stack determines which application layer software on the server should deal with a received request.

[1 mark]

3) Describe the role of the transport layer of the TCP/IP stack in the transmission of an email from a computer to an email server.

[3 marks]

4) Describe **one** function of the **network layer** of the TCP/IP stack.

[1 mark]

5) Explain what a well-known port is **and** why an email server must use one.

[1 mark]





- 6) A company uses a file server that stores files on magnetic hard disk drives. These files can be accessed by other computers through a network.

Describe how the individual layers of the TCP/IP stack in the file server would be used to transmit the file onto the network.

In your response, you do **not** need to describe how the file would be transmitted across the network or how the TCP/IP stack would be used in the computer that has requested the file. You only need to write about how the data would be put onto the network by the file server.

[8 marks]

