Name: Class: Mark:

1. A farm in the Yorkshire Dales contains an office with several PCs connected to the Internet. They have recently moved to an improved connection which has a greater bandwidth.

(a) Explain how a greater bandwidth has a positive impact on their business. [2]

(b) The connection type installed into the office was fibre optic.

Explain **two** advantages of using this connection type. [4]

**Advantage 1**

**Advantage 2**

(c) Once a year the farm organises a music festival which several thousand people attend. Many of the festival goers enjoy live streaming their experiences on various social media platforms. However, many people have found that they have poor mobile phone connections and are not able to use the Internet at suitable speeds.

Explain **three** factors which have an adverse effect on mobile phone connections. [6]

2. Phillip is a network technician in London. He has recently been employed to design and build a network for a small office containing five PCs and one printer.

Discuss the impact of different connection types on the performance of the office’s   
IT systems. [8]

[Total 20 marks]