

(a) Complete the table by describing the following types of IP address.

Type of IP address	Description
Static	
Public	

(b) Consider the following IP address:

Circle whether this IP address is IPv4, IPv6 or an invalid IP address.

Justify your choice.

..... [2]

Explain how the web browser uses the URL to access the web page.

[illegible]

(i) Calculate an estimate of the file size of the bitmap in kibibytes.

Working

.....

.....

.....

.....

File size of bitmap kibibytes

[2]

(ii) Explain why the actual file size may be larger than the one calculated in (d)(i).

..... [2]

(iii) Explain how a bitmap image is compressed using run-length encoding (RLE).

..... [2]

(a) Describe the characteristics of a LAN.

..... [2]

Computer



Computer



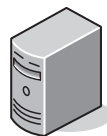
Computer



Computer



Computer



Server



Switch

..... [3]

Ethernet is used to transmit and receive data between the devices on the bus network.

[3]

Describe the threat and give a method of prevention.

[illegible]

[3]

8 A restaurant accesses software and stores data using cloud computing.

(a) (i) Give **two** benefits of storing data using cloud computing.

- 1
-
- 2
-
- [2]

(ii) Give **two** drawbacks of using cloud computing.

- 1
-
- 2
-
- [2]

(b) The restaurant uses touchscreens as input devices to allow staff to select items from a menu.

(i) Explain how a touchscreen converts the point of touch to a selection from the menu.

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-
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-
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- [4]

(ii) The image files that are displayed on the touchscreen have been corrupted.

Identify **two** examples of utility software that could be used to recover the images.

- 1
- 2
- [2]