

4 A company decides to create a network for its devices.

All the company devices are within a single room.

The employees will need to use their devices to send data to each other and share files.

The company decides to send data across the network using packet switching.

(a) An employee sends an email to another employee. The email is broken down into packets.

Describe the structure of a packet of data for the email.

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(b) The company decides to use parallel full-duplex data transmission to send the data across the network.

(i) Explain the reasons why the company have chosen this method of data transmission.

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(ii) Give **two** drawbacks of the company using this method of data transmission.

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(iii) Give **one** other method of data transmission the company could have chosen.

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