



**INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY  
HIGHER LEVEL AND STANDARD LEVEL  
PAPER 1**

Wednesday 16 May 2007 (afternoon)

1 hour

Candidate session number

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**INSTRUCTIONS TO CANDIDATES**

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Answer all the questions in the spaces provided.



1. A school has a local area network (LAN). When students work on the computers in their school, they can save their work onto the hard drive on the network server or a USB flash memory drive (memory stick). Some schools provide their students with USB drives at the beginning of the school year.



Source: [http://digitalunion.osu.edu/megaconference/www.megaconference.org/images/RadvisionMemoryStick\\_large.gif](http://digitalunion.osu.edu/megaconference/www.megaconference.org/images/RadvisionMemoryStick_large.gif)

- (a) Identify **two** tasks performed by a network server apart from the storage of users' files. *[2 marks]*

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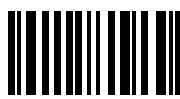
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*(Question 1 continued)*

- (b) Describe **one** advantage and **one** disadvantage of schools providing their students with USB drives. *[4 marks]*

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- (c) Explain **two** precautions that a student should take when using USB drives for saving important work. *[4 marks]*

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2. An author writes IT text books at home using his PC. He illustrates his work with many screen shots and images obtained from web sites, showing readers how to carry out various actions. He sends the images as bitmapped files. He sends his work to the publisher using his broadband internet connection.

(a) Define the term *bandwidth*. [2 marks]

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(b) Describe **one** advantage and **one** disadvantage of sending the images as bitmapped files instead of vector graphics files. [4 marks]

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*(Question 2 continued)*

- (c) With reference to **one** benefit and **one** problem, explain why there may be advantages and disadvantages for an author when working from home instead of in the publisher's office.

*[4 marks]*

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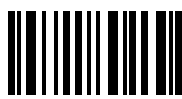
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3. Computer models and computer simulations are often used by businesses to test and train staff. One situation where a computer simulation is used is in the training of airline pilots.



Source: [http://www.technology.gov/2020MM/p\\_Pht040916.htm](http://www.technology.gov/2020MM/p_Pht040916.htm)

- (a) Define the term *computer simulation*.

[2 marks]

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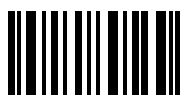
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*(Question 3 continued)*

- (b) Describe **two** input devices that would be used in a pilot training computer simulation. *[4 marks]*

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- (c) Explain **one** benefit and **one** problem associated with training pilots on simulators instead of using real planes. *[4 marks]*

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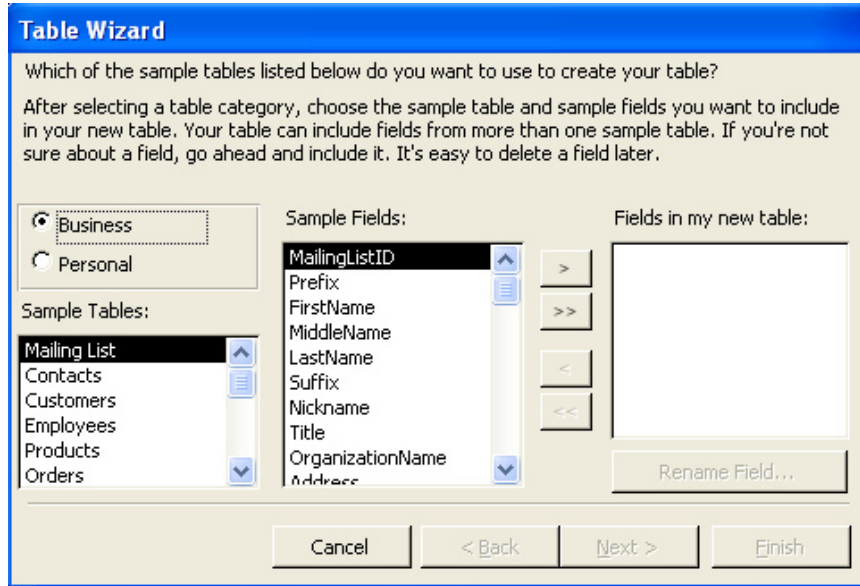
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- 4. The people who work for a company often have to carry out new tasks on their computers that they have never performed before. They may need training to learn new skills. Some companies pay for training but individuals may choose to undertake training at their own expense.

In some cases, unfamiliar tasks can be performed on computers by using wizards. One example is shown here.



- (a) (i) Identify the type of software that has provided this wizard. [1 mark]

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- (ii) Identify **one** other task that may be performed by a wizard. [1 mark]

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*(Question 4 continued)*

- (b) Users often get into difficulties when using application software. They may not always know how to make the application do exactly what they want. Apart from using wizards, describe **two** other IT methods that can help them to use the application software successfully.

*[4 marks]*

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- (c) Examine the extent to which it is the responsibility of the company, rather than the employee, to pay for training.

*[4 marks]*

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