Write your name here

Surname		Other names

Centre Number

Candidate Number

Information Technology

Level 1
Unit 1: Technology in Organisations

Wednesday 5 June 2013 – Morning	Paper Reference
Time: 45 minutes	**IT101/01**

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  – *there may be more space than you need*.

Information

- The total mark for this paper is 45.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

PEARSON

Answer ALL questions.

Most questions must be answered with a cross in a box ⊠. If you change your mind about an answer, put a line through the box ⊠ and then mark your new answer with a cross ⊠.

1   Penny has a PC at home with an internet connection.

   (a) This list shows some of the components of her PC.

   Put a cross ⊠ in the correct box to show whether the component is used for input, output or storage.

   The first one has been done for you.

   (4)

Component	Input	Output	Storage
Monitor	☐	⊠	☐
Mouse	☐	☐	☐
Speaker	☐	☐	☐
Keyboard	☐	☐	☐
DVD	☐	☐	☐

   (b) Penny uses a broadband connection to access the internet.

   Identify **one** component Penny must have installed on her PC to allow access to the internet.

   (1)

A	Web cam	⊠
B	Virus checker	⊠
C	Web browser	⊠
D	Search engine	⊠

   (c) One advantage to Penny of banking online is that she does not have to travel to the bank.

   (i) **One** other advantage to Penny is that she:

   (1)

A	can access her account 24/7	⊠
B	needs to pay fewer bills	⊠
C	does not have to pay bank charges	⊠
D	can withdraw cash 24/7	⊠

(ii) **One** advantage to the bank of providing online banking is:

(1)

A	increased bank charges	☒
B	reduced need for training	☒
C	improved security of customer data	☒
D	improved promotion of other services to customers	☒

(d) Penny frequently receives emails from her bank warning of the dangers of unauthorised people accessing computer data.

(i) The type of software used to send the email is:

(1)

A	application software	☒
B	system software	☒
C	security software	☒
D	communication software	☒

(ii) Penny can reduce the risk of unauthorised access by installing:

(1)

A	a virus checker	☒
B	an email filter	☒
C	an internet filter	☒
D	a firewall	☒

(Total for Question 1 = 9 marks)

2 Sandstreet School has a computer network.

(a) Workstations on the network connect to a main computer.

The name given to the main computer is a:

(1)

A	server	☒
B	hard drive	☒
C	PC	☒
D	laptop	☒

(b) A network manager restricts students' access to certain websites.

This would be done using:

(1)

A	a firewall	☒
B	an internet filter	☒
C	an email filter	☒
D	a virus checker	☒

(c) Students can use both wired and wireless devices to connect to the network.

Identify which **one** of these statements is correct.

(1)

A	All networks need an internet connection	☒
B	Wireless devices communicate using radio signals	☒
C	Wireless connections are more secure than wired connections	☒
D	Wired devices communicate using radio signals	☒

(d) Students can share resources, such as printers on the network.

One reason for having shared resources is to reduce:

(1)

A	print queues	☒
B	printing speed	☒
C	equipment costs	☒
D	paper costs	☒

(e) The school must keep the computer rooms secure.

Students access the computer room by using a fingerprint scanner.

What type of device is a fingerprint scanner?

(1)

A	Ergonomic	☒
B	Biometric	☒
C	Laser	☒
D	Magnetic	☒

(f) Students use the internet to download music.

Which **four** of these statements are correct?

Downloaded music:

(4)

A	can always be legally copied	☒
B	is protected by copyright laws	☒
C	is always cheaper than CDs	☒
D	uses very little storage	☒
E	can only be copied with the owner's permission	☒
F	is often a poorer sound quality than CDs	☒
G	can be bought 24/7	☒
H	is always sold by reputable websites	☒

(Total for Question 2 = 9 marks)

3 Supermarkets use a range of technologies in their stores.

(a) Barcodes are read as part of a supermarket's EPOS system.

(i) Identify the information that is provided by the barcode.

(1)

A	Supermarket name	☒
B	Item number	☒
C	Supermarket location	☒
D	Use by date	☒

(ii) When the item has been scanned the price is displayed on the screen.

The price is stored in the:

(1)

A	EPOS terminal	☒
B	Supplier's database	☒
C	Supermarket's database	☒
D	Barcode	☒

(b) EPOS systems are used to help supermarkets control stock levels.

This list shows the steps in the stock control system. They are not in the correct order.

Put the steps in the correct order by putting a number, from 1 to 5, next to each step.

The first one has been done for you.

(4)

The information is sent to the computer	
The stock level is reduced	
The barcode is scanned	1
The item is found on the stock list	
A message shows if stock needs reordering	

(c) EFTPOS systems are used widely in supermarkets.

(i) Customers can pay by debit card.

The electronic data on the card is stored in the:

(1)

A	printed name	☒
B	account number	☒
C	microchip	☒
D	hologram	☒

(ii) **One** benefit to the supermarket of using an EFTPOS system is that:

(1)

A	the payment goes straight into its bank account	☒
B	customers will not be able to get refunds	☒
C	it can charge for using the system	☒
D	only customers with cards can use the system	☒

(d) Many supermarkets provide self-service checkouts. Customers scan and pack items themselves.

Self-service checkouts:

(1)

A	lead to more input errors	☒
B	only accept cash	☒
C	reduce the number of checkouts needed	☒
D	reduce the number of staff needed	☒

(e) The temperature of the freezers in a supermarket must be monitored.

The device used to measure the temperature is a:

(1)

A	scanner	☒
B	gauge	☒
C	sensor	☒
D	control device	☒

(Total for Question 3 = 10 marks)

4 *Global Glazing* sells double glazed windows.

David is a sales representative who visits potential customers to provide quotations.

(a) *Global Glazing* provides all representatives with laptops that have mobile internet access.

The **main** reason for providing the laptops is to improve communication between:

(1)

A	representatives and home	☒
B	representatives and customers	☒
C	representatives and head office	☒
D	customers and head office	☒

(b) David uses the laptop to calculate quotations for customers.

The **most** appropriate software to use for calculations is a:

(1)

A	spreadsheet	☒
B	database	☒
C	graphics package	☒
D	CAD package	☒

(c) David uses his laptop to email quotations to head office.

(i) David will access the internet using a:

(1)

A	landline telephone	☒
B	wireless connection	☒
C	wired connection	☒
D	star network	☒

(ii) Downloading viruses could be a threat to the data on David's computer when he is connected to the internet.

A computer virus is a type of:

(1)

A	internet browser	☒
B	malicious software	☒
C	utility software	☒
D	spam	☒

(d) Having a laptop enables David to work from home.

The benefit to *Global Glazing* of representatives working from home is that:

(1)

A	communication will be improved	☒
B	fewer staff will be needed	☒
C	overheads will be reduced	☒
D	less training will be needed	☒

(e) David would like to backup the files on his laptop.

Identify which **four** of the following could be used to backup his files.

(4)

A	USB stick	☒
B	Magnetic stripe card	☒
C	Scanner	☒
D	DVD drive	☒
E	Chip and PIN card	☒
F	Portable hard disk	☒
G	CD drive	☒
H	Interface card	☒

(Total for Question 4 = 9 marks)

5 Car manufacturers use technology in many different ways.

(a) Computer Aided Design (CAD) is used to design new cars.

(i) Which **one** of these is an advantage of using CAD systems?

CAD systems:

(1)

A	allow designs to be viewed in 3D	☒
B	can be used by untrained staff	☒
C	can calculate fuel consumption	☒
D	reduce pollution	☒

(ii) A printer can be used to produce a hard copy of a design.

Which other device could be used?

(1)

A	Scanner	☒
B	Plotter	☒
C	Sensor	☒
D	Projector	☒

(iii) CAD systems are expensive to install.

Car manufacturers are willing to invest in them because CAD:

(1)

A	improves the designs of the cars	☒
B	increases the number of design staff employed	☒
C	decreases the number of production staff needed	☒
D	improves manufacturing performance	☒

(b) Computer Aided Manufacture (CAM) is used to produce cars.

CAM systems are used because they:

(4)

A	improve consistency of production	☒
B	reduce the cost of production	☒
C	do not need maintenance	☒
D	can be used to carry out repetitive tasks	☒
E	reduce the cost of raw materials	☒
F	are cheap to buy	☒
G	can increase the rate of production	☒
H	do not need monitoring	☒

(c) The car manufacturer uses a process control system to mix paint colours.

The car manufacturer uses this system because it improves:

(1)

A	quality control	☒
B	pollution levels	☒
C	stock control	☒
D	drying times	☒

(Total for Question 5 = 8 marks)

TOTAL FOR PAPER = 45 MARKS

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