

Write your name here

Surname	Other names
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**Edexcel**  
**Principal Learning**

Centre Number

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Candidate Number

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# Information Technology

Level 1

Unit 1: Technology in Organisations

Wednesday 30 May 2012 – Morning  
Time: 45 minutes

Paper Reference

**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.

## 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.

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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 EPOS systems are used in supermarkets.

(a) Here is a picture of an EPOS terminal.



Identify each component by writing the correct letter in the table and put a cross to show whether it is used for input or output.

The first one has been done for you.

(6)

Component	Letter	Input	Output
Barcode scanner	C	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Receipt printer		<input type="checkbox"/>	<input type="checkbox"/>
Keyboard		<input type="checkbox"/>	<input type="checkbox"/>
Monitor		<input type="checkbox"/>	<input type="checkbox"/>

(b) Barcodes on the goods are scanned at the checkout.

(i) Identify the information that is held in the barcode.

(1)

A	Supermarket name	<input type="checkbox"/>
B	Item price	<input type="checkbox"/>
C	Supermarket location	<input type="checkbox"/>
D	Item number	<input type="checkbox"/>



(ii) Which **one** of these statements is correct?

(1)

<b>A</b>	Barcodes reduce theft from supermarkets	<input type="checkbox"/>
<b>B</b>	Barcode scanners use chip and PIN technology	<input type="checkbox"/>
<b>C</b>	Barcodes are entered using OCR scanners	<input type="checkbox"/>
<b>D</b>	Barcode scanning is quicker than manual input	<input type="checkbox"/>

(c) Many supermarkets have self-service checkouts.

Customers scan and pack their own goods.

**One** reason for introducing self-service checkouts is to reduce:

(1)

<b>A</b>	the number of checkouts	<input type="checkbox"/>
<b>B</b>	input errors	<input type="checkbox"/>
<b>C</b>	opening hours	<input type="checkbox"/>
<b>D</b>	the number of staff	<input type="checkbox"/>

**(Total for Question 1 = 9 marks)**



2 The internet is used by many people and organisations to buy and sell goods.

(a) Identify **four** components from this list that help users to connect to the internet.

(4)

<b>A</b>	Web browser	<input type="checkbox"/>
<b>B</b>	Speaker	<input type="checkbox"/>
<b>C</b>	Web cam	<input type="checkbox"/>
<b>D</b>	Chip and PIN reader	<input type="checkbox"/>
<b>E</b>	Modem	<input type="checkbox"/>
<b>F</b>	Broadband connection	<input type="checkbox"/>
<b>G</b>	Keyboard	<input type="checkbox"/>
<b>H</b>	Internet service provider	<input type="checkbox"/>

(b) When using the internet it is important to protect the data on a computer from unauthorised access.

To prevent unauthorised access a user should install:

(1)

<b>A</b>	a virus checker	<input type="checkbox"/>
<b>B</b>	an operating system	<input type="checkbox"/>
<b>C</b>	a firewall	<input type="checkbox"/>
<b>D</b>	a browser	<input type="checkbox"/>



(c) Internet auction sites are used by many people to buy and sell goods.

(i) Put a cross  in the correct box to complete each sentence below.

The first one has been done for you.

(4)

Online	<input checked="" type="checkbox"/>	auction sites allow people to buy goods over the internet.
Offline	<input type="checkbox"/>	
Users must provide their	<input type="checkbox"/>	email address
	<input type="checkbox"/>	bank account number
Photographs of goods for sale are	<input type="checkbox"/>	downloaded
	<input type="checkbox"/>	uploaded
Buyers have	<input type="checkbox"/>	restricted
	<input type="checkbox"/>	24/7
Buyers can pay for goods using	<input type="checkbox"/>	debit cards
	<input type="checkbox"/>	loyalty cards

(ii) Identify which **one** of these statements about items bought from an internet auction site is accurate.

Internet auction sites:

(1)

<b>A</b>	allow buyers to try goods before paying	<input type="checkbox"/>
<b>B</b>	check that photographs are accurate	<input type="checkbox"/>
<b>C</b>	check prices against shop prices	<input type="checkbox"/>
<b>D</b>	allow buyers to bid for goods	<input type="checkbox"/>

(Total for Question 2 = 10 marks)



3 ATMs are used to withdraw cash from bank accounts.

(a) This list shows the steps that must be followed to withdraw cash.

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

Step 1 has been done for you.

(4)

Enter PIN	
Insert card	1
Select service	
Take cash	
Enter cash amount	

(b) The details of the withdrawal are stored on:

(1)

<b>A</b>	the ATM	<input type="checkbox"/>
<b>B</b>	a mainframe computer	<input type="checkbox"/>
<b>C</b>	the customer's card	<input type="checkbox"/>
<b>D</b>	a laptop	<input type="checkbox"/>

(c) The customer's bank card has electronic data stored on it.

(i) Where on the card is the electronic data stored?

(1)

<b>A</b>	Hologram	<input type="checkbox"/>
<b>B</b>	Signature strip	<input type="checkbox"/>
<b>C</b>	Printed number	<input type="checkbox"/>
<b>D</b>	Microchip	<input type="checkbox"/>



(ii) Which piece of electronic data is used to identify the customer?

(1)

<b>A</b>	Surname	<input type="checkbox"/>
<b>B</b>	PIN number	<input type="checkbox"/>
<b>C</b>	Card number	<input type="checkbox"/>
<b>D</b>	Email address	<input type="checkbox"/>

(d) Banks and their customers benefit from the widespread availability of ATMs.

(i) **One** benefit to a bank is that they can:

(1)

<b>A</b>	reduce the number of branches	<input type="checkbox"/>
<b>B</b>	increase staff wages	<input type="checkbox"/>
<b>C</b>	reduce the number of staff filling ATMs	<input type="checkbox"/>
<b>D</b>	increase charges to customers	<input type="checkbox"/>

(ii) **One** benefit to a customer is that:

(1)

<b>A</b>	personal information can be updated	<input type="checkbox"/>
<b>B</b>	account data is more secure	<input type="checkbox"/>
<b>C</b>	account charges are reduced	<input type="checkbox"/>
<b>D</b>	cash can be withdrawn 24/7	<input type="checkbox"/>

**(Total for Question 3 = 9 marks)**



4 Car manufacturers use technology systems in many different ways.

(a) Robots are used to spray-paint cars.

(i) **One** reason for using a robot rather than a person is that robots:

(1)

<b>A</b>	produce consistent results	<input type="checkbox"/>
<b>B</b>	do not cause pollution	<input type="checkbox"/>
<b>C</b>	do not need maintenance	<input type="checkbox"/>
<b>D</b>	always meet deadlines	<input type="checkbox"/>

(ii) The temperature in the spray-painting area must be kept constant.

Identify the device that would be used to measure the temperature.

(1)

<b>A</b>	OCR	<input type="checkbox"/>
<b>B</b>	Scanner	<input type="checkbox"/>
<b>C</b>	Sensor	<input type="checkbox"/>
<b>D</b>	Monitor	<input type="checkbox"/>

(iii) If the temperature goes below set limits a heater is switched on.

The heater is a type of:

(1)

<b>A</b>	input device	<input type="checkbox"/>
<b>B</b>	control device	<input type="checkbox"/>
<b>C</b>	storage device	<input type="checkbox"/>
<b>D</b>	monitoring device	<input type="checkbox"/>





(b) CAD systems are used to design cars.

(i) Which **four** of these statements are correct?

CAD systems:

(4)

<b>A</b>	allow shapes to be viewed from many angles	<input type="checkbox"/>
<b>B</b>	reduce component costs	<input type="checkbox"/>
<b>C</b>	have a standard set of pre-drawn shapes	<input type="checkbox"/>
<b>D</b>	can calculate fuel consumption	<input type="checkbox"/>
<b>E</b>	allow images to be viewed in 3D	<input type="checkbox"/>
<b>F</b>	produce very accurate drawings	<input type="checkbox"/>
<b>G</b>	reduce manufacturing time	<input type="checkbox"/>
<b>H</b>	can be used by untrained staff	<input type="checkbox"/>

(ii) Which device would be used to produce a hard copy of a design?

(1)

<b>A</b>	Projector	<input type="checkbox"/>
<b>B</b>	Plotter	<input type="checkbox"/>
<b>C</b>	Digital camera	<input type="checkbox"/>
<b>D</b>	Speaker	<input type="checkbox"/>

(c) The increased use of technology systems has led to a change in the pattern of employment in manufacturing.

Which **one** of the following best describes this change?

(1)

<b>A</b>	More skilled workers and less unskilled workers	<input type="checkbox"/>
<b>B</b>	More skilled workers and more unskilled workers	<input type="checkbox"/>
<b>C</b>	Less skilled workers and less unskilled workers	<input type="checkbox"/>
<b>D</b>	Less skilled workers and more unskilled workers	<input type="checkbox"/>

(Total for Question 4 = 9 marks)



5 *Kookykitchens* sells 'made to measure' kitchens.

Sales representatives visit potential customers' houses, discuss their needs and take measurements.

Each sales representative has a laptop with mobile internet access.

(a) The sales representatives email measurements to *Kookykitchens* using a:

(1)

<b>A</b>	wired network	<input type="checkbox"/>
<b>B</b>	local area network	<input type="checkbox"/>
<b>C</b>	wireless network	<input type="checkbox"/>
<b>D</b>	peer-to-peer network	<input type="checkbox"/>

(b) Providing sales representatives with laptops enables them to work from home.

The advantage to *Kookykitchens* of salesmen working from home is that:

(1)

<b>A</b>	fewer staff are needed	<input type="checkbox"/>
<b>B</b>	less training is needed	<input type="checkbox"/>
<b>C</b>	costs are reduced	<input type="checkbox"/>
<b>D</b>	prices can be increased	<input type="checkbox"/>

(c) Sales representatives use route finders to plan journeys to customers' houses.

Identify **one** item of information that must be entered to plan a journey.

(1)

<b>A</b>	Vehicle registration number	<input type="checkbox"/>
<b>B</b>	Departure date	<input type="checkbox"/>
<b>C</b>	Customer's post code	<input type="checkbox"/>
<b>D</b>	Customer's name	<input type="checkbox"/>



(d) Identify **one** item of information that will always be provided by the route finder. (1)

<b>A</b>	Road numbers	<input type="checkbox"/>
<b>B</b>	Traffic hold-ups	<input type="checkbox"/>
<b>C</b>	Weather conditions	<input type="checkbox"/>
<b>D</b>	Diversions	<input type="checkbox"/>

(e) Congestion charging systems are used in many cities.

The registration number is used to trace car owners who have not paid congestion charges.

The list shows the steps that must be followed to contact the owner of a car.

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

The last step (step 5) has been done for you.

(4)

The owner is contacted by the authorities	<b>5</b>
A roadside camera records the registration number	
The owner of the vehicle is identified	
The information is sent to a database	
The date and time are recorded	

**(Total for Question 5 = 8 marks)**

**TOTAL FOR PAPER = 45 MARKS**



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