Edexcel
Principal Learning

Information Technology

Paper 1
Unit 1: Technology in Organisations

Wednesday 13 January 2010 – Afternoon
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.

Turn over ▶

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1 (a) EPOS systems are used in supermarkets.

Barcodes are scanned as part of the EPOS system.

Which **one** of the following statements is correct?

(1)

A	Barcodes reduce theft from supermarkets.	☒
B	Barcodes are input using OCR scanners.	☒
C	Barcodes reduce data entry errors.	☒
D	Barcodes are always input manually.	☒

(b) Identify **one** piece of information that is contained in a barcode.

(1)

A	Checkout number.	☒
B	Sell by date.	☒
C	Item price.	☒
D	Item code.	☒

(c) These are the steps used in an EPOS 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.

Step 1 has been done for you.

(4)

The price is sent to the till.	
The barcode is scanned.	**1**
An itemised receipt is printed.	
The item price is found.	
The barcode number is sent to the database.	

(d) Many supermarkets give customers loyalty cards.

One device used to collect electronic data from a loyalty card is a:

(1)

A	magnetic stripe reader.	☒
B	sensor.	☒
C	optical mark reader.	☒
D	touch screen.	☒

(e) **One** advantage to the customer of joining a loyalty card scheme is that:

(1)

A	checkout queues will be shorter.	☒
B	points can be used to buy items.	☒
C	item prices are increased.	☒
D	items can be scanned quickly.	☒

(f) **One** reason for a supermarket to introduce a loyalty card scheme is to:

(1)

A	monitor checkout queues.	☒
B	reduce the number of staff.	☒
C	reduce prices.	☒
D	increase sales.	☒

Total for Question 1 = 9 marks

H 3 5 8 0 3 A 0 3 1 6

2 Eezzee-Tunes is a chain of music stores offering a wide choice of music and other multimedia products.

(a) Music in the stores is sold on CDs. CDs are a type of:

(1)

A	input device.	☒
B	storage media.	☒
C	output device.	☒
D	software.	☒

(b) Eezzee-Tunes has decided to set up a website which will allow customers to buy music online.

One reason for setting up the website is to:

(1)

A	increase prices.	☒
B	respond to changing legislation.	☒
C	improve staff performance.	☒
D	access new markets.	☒

(c) Customers using the website can get regular updates from Eezzee-Tunes via email.

Which **one** of the following is necessary to send an email?

(1)

A	Communication software.	☒
B	Anti-virus software.	☒
C	Application software.	☒
D	Security software.	☒

(d) Which **one** of the following is an acceptable means of paying for music bought online?

(1)

A	National Insurance card.	☒
B	Cash.	☒
C	Debit card.	☒
D	Identity card.	☒

(e) There are laws governing the copying of downloaded music.

The laws were set up to protect the rights of the:

(1)

A	music owner.	☒
B	music seller.	☒
C	music buyer.	☒
D	music copier.	☒

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

Put a cross ☒ in the correct box to complete each sentence below.

The first one has been done for you.

(4)

Internet auction sites give buyers access to $\dfrac{\text{global} \ ☒}{\text{local} \ ☒}$ markets.

$\dfrac{\text{Online} \ ☒}{\text{Offline} \ ☒}$ auction sites allow people to buy and sell goods over the internet.

To log on registered users must provide their $\dfrac{\text{bank details} \ ☒}{\text{password} \ ☒}$.

Buyers can view photographs of items for sale which have been $\dfrac{\text{uploaded} \ ☒}{\text{downloaded} \ ☒}$ to the auction site.

Buyers can use a $\dfrac{\text{secure payment} \ ☒}{\text{cash back} \ ☒}$ system to pay for their goods.

(g) Organisations may sell their products using internet auction sites.

One reason they choose to use this method of selling goods is to:

(1)

A	increase prices.	☒
B	increase sales.	☒
C	increase the costs of holding stocks of goods.	☒
D	increase the charges for sending goods.	☒

Total for Question 2 = 10 marks

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3 Car manufacturers use technology in many different ways.

(a) Computer Aided Design (CAD) is used by car manufacturers when designing new cars.

Which **four** of the following statements are advantages of using CAD software?

(4)

A	Accurate scaled designs can be produced.	☒
B	Designs can be used to calculate sales.	☒
C	Manufacturing time will be reduced.	☒
D	No skill is needed to produce the designs.	☒
E	Mistakes can be corrected easily.	☒
F	Manufacturing costs will be reduced.	☒
G	Designs can be viewed from different angles.	☒
H	Multiple copies of the designs can be produced easily.	☒

(b) Which device would be used to produce a hard copy of the CAD designs?

(1)

A	Digital camera.	☒
B	USB stick.	☒
C	Printer.	☒
D	Sensor.	☒

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(c) Car manufacturers use Computer Aided Manufacturing (CAM) when producing their cars.

One reason for using CAM is that it:

(1)

A	reduces industrial pollution.	☒
B	is used to carry out repetitive tasks.	☒
C	does not need monitoring.	☒
D	is cheap to buy the equipment.	☒

(d) Robots are used as part of CAM systems.

Which **one** of the following statements is correct?

(1)

A	Robots must be programmed to carry out tasks.	☒
B	Robots will respond instantly to unusual situations.	☒
C	Robots can think for themselves.	☒
D	Robots do not cost anything to run.	☒

Total for Question 3 = 7 marks

4 Most banks now have online banking facilities for customers.

(a) The **four** most likely reasons for introducing online banking are to:

(4)

A	increase charges to customers.	☒
B	access customers over a wider area.	☒
C	reduce staff travelling time.	☒
D	improve working conditions for staff.	☒
E	increase revenue.	☒
F	respond to customer demand.	☒
G	increase staff wages.	☒
H	reduce the number of staff.	☒

(b) Customers are attracted to online banking as they do not need to leave home.

One other benefit to customers is that online banking:

(1)

A	allows 24 hour access to cash.	☒
B	reduces the threat of fraud.	☒
C	allows 24 hour access to their account.	☒
D	reduces the number of bills to be paid.	☒

(c) Customers need a password to access their online account.

Which **one** of the following would give the most secure password?

(1)

A	Letters and numbers.	☒
B	Customer name.	☒
C	Letters only.	☒
D	Numbers only.	☒

(d) ATMs are used by individuals to withdraw cash from their bank accounts.

One benefit to a bank of installing ATMs is to reduce the:

(1)

A	staff needed to answer queries.	☒
B	number of branches.	☒
C	charges for withdrawing cash.	☒
D	charges for paying in cash.	☒

(e) In order to withdraw cash from an ATM a customer must have a:

(1)

A	debit card and password.	☒
B	pre-payment card and PIN.	☒
C	loyalty card and password.	☒
D	debit card and PIN.	☒

(f) The information read from a customer's card is checked against the bank's database.

The database is stored in:

(1)

A	an ATM.	☒
B	a portable device.	☒
C	a mainframe computer.	☒
D	an operating system.	☒

Total for Question 4 = 9 marks

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5 Window World sells double glazed windows.

Sales staff visit customers to take window measurements.
Window World provides laptop computers with mobile internet access for the sales staff so that they can send measurements to head office.

(a) The main reason for providing the laptop computers is to improve communication between the:

(1)

A	sales staff and home.	☒
B	customer and sales staff.	☒
C	sales staff and head office.	☒
D	customer and head office	☒

(b) The sales staff email the measurements to head office from the customer's house.

The email will be sent from the laptop via the internet using a:

(1)

A	wired network.	☒
B	landline telephone.	☒
C	mobile telephone.	☒
D	wireless network.	☒

(c) Head office sends a word processed quotation to the customer.

A word processor is a type of:

(1)

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

(d) Providing laptops means that sales staff can work from home.

The benefit to Window World is that:

(1)

A	costs will be reduced.	☒
B	less staff will be needed.	☒
C	higher prices can be charged.	☒
D	more staff will be needed.	☒

(e) Problems can occur when accessing the internet.

The table shows some problems that can occur and possible solutions.

Put a cross ☒ in the correct box to match each problem with its solution.

(4)

Problem	Solution			
	Firewall	Internet filter	Email filter	Anti-virus software
Anti-social material	☒	☒	☒	☒
Hacking attempts	☒	☒	☒	☒
Viruses	☒	☒	☒	☒
Spam	☒	☒	☒	☒

(f) Sales staff use route finders to help them find a customer's house.

Identify **one** item of data that must be entered.

(1)

A	Customer's name.	☒
B	Car registration number.	☒
C	Date of the journey.	☒
D	Customer's postcode.	☒

(g) Which **one** item of information will the route finder **always** give?

(1)

A	Road conditions.	☒
B	Speed limits.	☒
C	Road numbers.	☒
D	Weather conditions.	☒

Total for Question 5 = 10 marks

TOTAL FOR PAPER = 45 MARKS

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