Write your name here

Surname		Other names

**Edexcel
Principal Learning**

Centre Number

Candidate Number

Information Technology

**Level 1
Unit 1: Technology in Organisations**

Tuesday 10 January 2012 – 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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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 Josie runs a small business producing handmade greeting cards.

   She has a PC that she uses to:

   • design cards

   • carry out standard office tasks.

   (a) Identify an input device that Josie will have as part of her PC system.

   (1)

A	Printer	⊠
B	Speaker	⊠
C	Hard disc	⊠
D	Mouse	⊠

   (b) Four tasks that Josie uses the PC for are listed on the left.

   Four software packages are listed on the right.

   Draw a line to link each task to the **most appropriate** software package.

   (4)

Task	**Software package**

   | Writing a letter to a customer | Spreadsheet |

   | Calculating selling prices | Graphics |

   | Designing cards | Word processing |

   | Storing customer details | Database |

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(c) Josie has produced a presentation to advertise her cards to a large group.

(i) A presentation package is an example of:

(1)

A	an operating system	☒
B	communication software	☒
C	application software	☒
D	a manufacturing system	☒

(ii) Identify the output device that Josie should use to show the presentation to a **group** of customers.

(1)

A	Data projector	☒
B	Monitor	☒
C	Laser printer	☒
D	Plotter	☒

(d) Josie has decided that a website would be a better way of advertising her cards.

One advantage to Josie would be that she could:

(1)

A	produce a wider range of cards	☒
B	reduce the costs of producing cards	☒
C	reduce the number of staff	☒
D	access customers from a wider area	☒

(e) Josie includes a facility to add a personalised message to the cards when ordering online.

One reason for this is to:

(1)

A	improve communications with staff	☒
B	reduce production time	☒
C	reduce the costs of printing cards	☒
D	increase sales	☒

(Total for Question 1 = 9 marks)

2 Joshua has an online bank account.

He needs to set a password to allow access to his account.

(a) Which **one** of the following would give Joshua the strongest password?

(1)

A	A1d2G3j4	☒
B	A1d2G3j#	☒
C	a1d2g3j4	☒
D	adgjlxv	☒

(b) Joshua must ensure that his password is kept secure.

Which **one** of the following would be sensible advice for him to follow?

(1)

A	Change the password regularly	☒
B	Write the password down	☒
C	Keep the same password for important files	☒
D	Tell someone in case he forgets it	☒

(c) One of the main benefits for Joshua of using online banking is that he does not need to leave home.

Identify **one** other benefit for Joshua.

(1)

A	His account is more secure	☒
B	He can withdraw cash 24/7	☒
C	He has fewer bills to pay	☒
D	His account can be accessed 24/7	☒

(d) Banks also benefit from their customers using online banking.

Four reasons for introducing online banking are to:

(4)

A	access a wider range of customers	☒
B	respond to staff demand	☒
C	improve communication with staff	☒
D	improve data security	☒
E	respond to customer demand	☒
F	reduce costs	☒
G	increase revenue	☒
H	reduce charges	☒

(e) Banks often include email facilities on their websites.

What type of software is needed to send an email?

(1)

A	Application software	☒
B	Communication software	☒
C	Security software	☒
D	Management software	☒

(f) **One** reason for banks providing email facilities on their websites is to:

(1)

A	improve communication with customers	☒
B	reduce the number of statements produced	☒
C	improve communication with staff	☒
D	reduce customer printing costs	☒

(Total for Question 2 = 9 marks)

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3 *BBY Burgers* is a chain of fast food outlets. They use EPOS systems in all outlets.

(a) Identify the device that is used to enter order details **and** view the price.

(1)

A	Keyboard	☒
B	Touch screen	☒
C	Scanner	☒
D	Barcode reader	☒

(b) Sales data is collected by the EPOS system.

Identify the type of software used to store the data.

(1)

A	Operating system software	☒
B	Communication software	☒
C	Security software	☒
D	Application software	☒

(c) Identify **four** advantages to *BBY Burgers* of using an EPOS system.

(4)

A	Input errors are reduced	☒
B	Burger quality is consistent	☒
C	Burgers can be produced at a lower cost	☒
D	Price changes can be made easily	☒
E	Stocks of burgers meet demand	☒
F	More checkouts can be opened	☒
G	Orders are processed quickly	☒
H	Opening hours can be extended	☒

(d) *BBY Burgers* has a loyalty card scheme.

Customers are given a card and earn points every time they buy a burger.

One reason for introducing this scheme is to:

(1)

A	increase sales of burgers	☒
B	improve communication with customers	☒
C	reduce queuing time for customers	☒
D	increase the price of burgers	☒

(e) Where on the loyalty card will the electronic data be stored?

(1)

A	Printed name	☒
B	Hologram	☒
C	Printed number	☒
D	Magnetic stripe	☒

(Total for Question 3 = 8 marks)

4 *Bairns-toys* sells children's toys over the internet.

Customers order toys via the *Bairns-toys* website.

(a) Identify the hardware that a customer must have in order to connect to the internet.

(1)

A	Printer	☒
B	Modem	☒
C	Monitor	☒
D	Plotter	☒

(b) Identify **one** benefit to *Bairns-toys* of using an online ordering system.

(1)

A	Lower overheads	☒
B	Improved staff communication	☒
C	Lower delivery charges	☒
D	Improved staff satisfaction	☒

(c) These steps show the process of ordering goods online from *Bairns-toys*. 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 one.

Step 1 has been done for you.

(4)

Enter payment card details	
Bank authorises payment	
Add items to basket	1
Confirmation of payment message displayed	
Bairns-toys contacts bank	

(d) When the order is complete *Bairns-toys* sends a confirmation email to the customer.

One reason for sending the email is to:

(1)

A	improve communication with customers	☒
B	improve communication with staff	☒
C	increase revenue from delivery charges	☒
D	increase revenue from sales	☒

(e) *Bairns-toys* attaches a barcode to all parcels ready for delivery.

(i) Which item of information **must** be included in the barcode to allow the parcel to be tracked?

(1)

A	Customer payment details	☒
B	Order date	☒
C	Parcel identity number	☒
D	Number of items in the parcel	☒

(ii) Delivery is recorded by the driver using a hand-held device to read the barcode.

This device is:

(1)

A	an output device	☒
B	a storage device	☒
C	an input device	☒
D	a communication device	☒

(iii) Modern hand-held devices can be used to collect electronic signatures from customers to confirm receipt of their parcel.

This is possible due to:

(1)

A	changes in legislation	☒
B	reduced delivery times	☒
C	improved technology	☒
D	increased training	☒

(f) Delivery drivers use GPS to find customers' houses.

(i) GPS devices find locations using signals sent via:

(1)

A	wireless networks	☒
B	satellites	☒
C	the internet	☒
D	wired networks	☒

(ii) What device must be installed in the delivery vehicle to use GPS?

(1)

A	A receiver	☒
B	A sensor	☒
C	A router	☒
D	A transmitter	☒

(Total for Question 4 = 12 marks)

5 *GYM2012* is a fitness studio.

The studio keeps a record of members' attendance.

The data is collected from membership cards that are 'read' when a member enters the studio.

(a) Identify the device that is used to 'read' the data on the card.

(1)

A	OCR	☒
B	Biometric scanner	☒
C	Touch screen	☒
D	Chip and PIN reader	☒

(b) The attendance records are reviewed regularly.

When a member has not attended for four weeks *GYM2012* sends an email to encourage them to return.

The **main** reason for sending the email is to:

(1)

A	maintain income from members	☒
B	attract new members	☒
C	improve members' fitness	☒
D	reduce costs	☒

(c) Some items of equipment in the fitness studio have built-in TV screens. These are very expensive to buy.

One reason for *GYM2012* investing in this equipment is to:

(1)

A	encourage members to work harder	☒
B	attract new members	☒
C	entertain the staff	☒
D	discourage the use of mobile devices	☒

.

(d) Rowing machines in the studio are set up to monitor members' heart rates.

Put a cross ☒ in the correct box to complete each of the sentences.

The first one has been done for you.

(4)

A heart rate monitor is attached to the member's arm and a $\dfrac{\text{sensor} \quad ☒}{\text{scanner} \quad ☒}$

is used to $\dfrac{\text{input} \quad ☒}{\text{output} \quad ☒}$ their heart rate.

The reading is sent to a $\dfrac{\text{controller} \quad ☒}{\text{processor} \quad ☒}$ where data is analysed

by the $\dfrac{\text{hardware} \quad ☒}{\text{software} \quad ☒}$.

The reading is displayed and the member can save it to a $\dfrac{\text{hard drive} \quad ☒}{\text{USB stick} \quad ☒}$

to take home.

(Total for Question 5 = 7 marks)

TOTAL FOR PAPER = 45 MARKS