

FOR OFFICIAL USE

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**F**

**0560/401**



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KU PS TOTAL

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NATIONAL  
QUALIFICATIONS  
2011

TUESDAY 3, MAY  
9.00 AM – 10.00 AM

COMPUTING STUDIES  
STANDARD GRADE  
Foundation Level

Fill in these boxes and read what is printed below.

Full name of centre

Town

Forename(s)

Surname

Date of birth

Day Month Year

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Scottish candidate number

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Number of seat

Read each question carefully.

Attempt **all** questions.

Write your answers in the space provided on the question paper.

Write as neatly as possible.

Use **blue** or **black ink**.

Answer in sentences wherever possible.

Before leaving the examination room you must give this book to the Invigilator. If you do not, you may lose all the marks for this paper.



1. ACE Swimming Club use a computer program to keep track of club clothing sales.

The table below shows some of the items on sale.

|   | A         | B           | C     | D       |
|---|-----------|-------------|-------|---------|
| 1 | Item      | Number Sold | Price | Total   |
| 2 | Swimsuits | 8           | £9.99 | £79.92  |
| 3 | Trunks    | 12          | £7.99 | £95.88  |
| 4 | Swim Caps | 25          | £4.99 | £124.75 |
| 5 | T-Shirts  | 15          | £8.99 | £134.85 |
| 6 | Goggles   | 10          | £3.99 | £39.90  |
| 7 |           |             |       |         |
| 8 |           | Total Sales |       | £475.30 |

- (a) State the type of application package used to create this table.

\_\_\_\_\_

- (b) Use the words below to complete the sentences.

*formula*

*value*

*text*

Use each word only **once**.

Cell A3 contains \_\_\_\_\_

Cell B4 contains a \_\_\_\_\_

Cell D6 contains a \_\_\_\_\_

- (c) The data in cell C6 should be £4.99 not £3.99. The contents of **two** other cells will change when the correct data is entered.

State the **two** other cells that will change when the correct data is entered.

1 \_\_\_\_\_

2 \_\_\_\_\_

| KU | PS |
|----|----|
|    |    |
| 1  |    |
|    |    |
| 3  |    |
|    |    |
|    | 2  |
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|    |    |

## 1. (continued)

- (d) The club secretary keeps a
- backup*
- of the file.

State **one** reason why the club secretary would keep a backup.

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- (e) Cell D8 contains a formula which calculates the Total Sales.

Which of the following is the correct formula?

Tick (✓) **one** box only.= D2 \* D6 ☐= D2 + D6 ☐= D2 – D6 ☐= SUM (D2:D6) ☐

KU PS

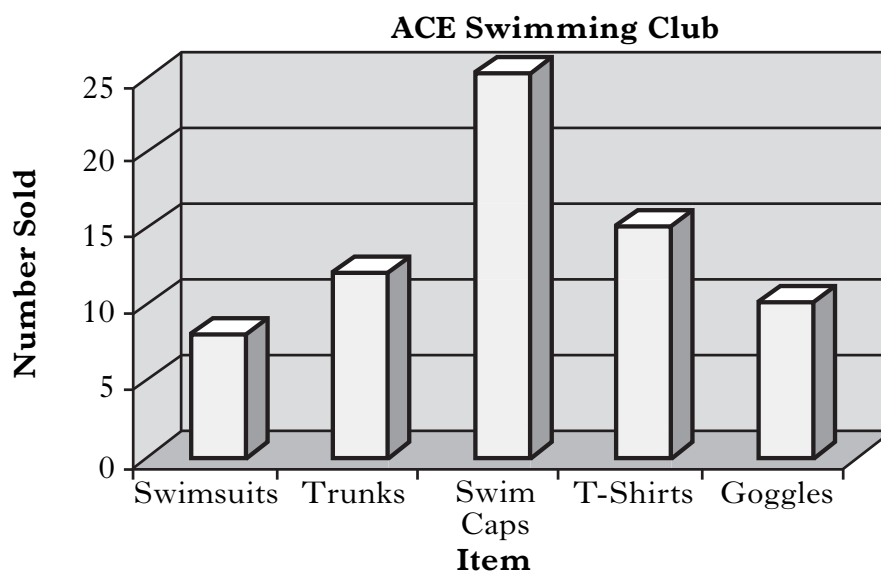
1

1

[Turn over

## 1. (continued)

(f) The number of each item sold is shown in the following way.



(i) State the feature of the package that has been used to create this.

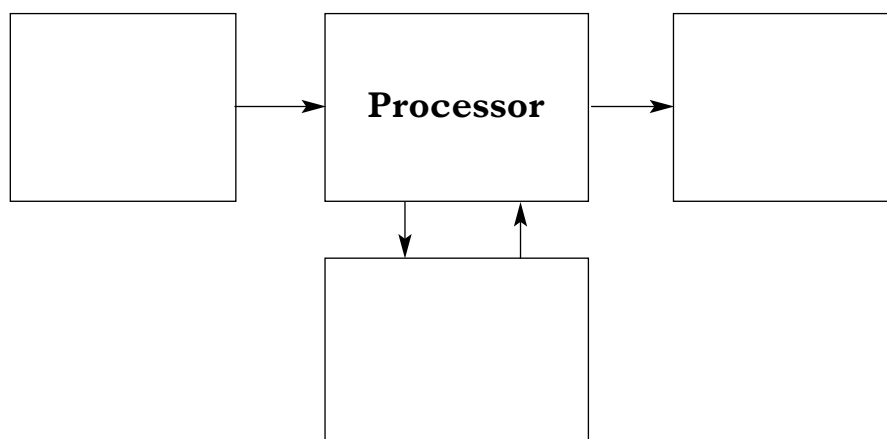
1

(ii) State **one** reason for displaying the information in this way rather than as a table of figures.

1

- Input devices*    *Output devices*    ~~*Processor*~~    *Backing Storage Devices*

One has been completed for you.



- State **two** other examples of backing storage.

- State **two** differences between RAM and ROM.

**[Turn over**

## 2. (continued)

(d) A variety of devices are used for input, output and backing storage.

Beside each device insert the correct type. The first one has been done for you.

*INPUT**OUTPUT**BACKING STORAGE*

|                                                                                     |                        |
|-------------------------------------------------------------------------------------|------------------------|
|    | <b>BACKING STORAGE</b> |
|    |                        |
|    |                        |
|   |                        |
|  |                        |
|  |                        |

(e) Put each of the following terms next to the correct statement.

## Operating System

The physical parts of the computer:\_\_\_\_\_

What do the letters “VDU” stand for?

V \_\_\_\_\_ D \_\_\_\_\_ U \_\_\_\_\_

3

3

**[Turn over**

- Town:** Grangemouth

**Owners Name:** Katie Craigen

**House Type:** Detached

**Price:** £125 000

**House:**



- (a) Using the above example, state a field that contains:

(i) Text: \_\_\_\_\_

(ii) A graphic: \_\_\_\_\_

(iii) A number: \_\_\_\_\_

- (b) A filing cabinet was previously used to store house details.

State **two** advantages of storing information using a computerised database.

2



**3. (continued)**

(c) Here is a printout of part of the database.

| Town     | Address      | Owners Name   | Number of Bedrooms | Price    | House Type    |
|----------|--------------|---------------|--------------------|----------|---------------|
| Falkirk  | Green Lane   | Lewis Black   | 1                  | £90 000  | Flat          |
| Bo'ness  | Wynd Road    | Sophie Butler | 2                  | £125 000 | Semi Detached |
| Falkirk  | Water Road   | Brian Reid    | 3                  | £175 000 | Detached      |
| Larbert  | Forth Avenue | Satnam Virdee | 2                  | £100 000 | Mid Terrace   |
| Stirling | Wynd Close   | Claire Smith  | 4                  | £250 000 | Detached      |

(i) How many fields are shown in the above table? \_\_\_\_\_

**1**

(ii) How many records are shown in the above table? \_\_\_\_\_

**1**

(d) The estate agent uses this database to find houses that are suitable for new buyers.

(i) To find all houses in Larbert the estate agent will \_\_\_\_\_

for "Larbert" on the field \_\_\_\_\_ .

**2**

(ii) To find the cheapest house the estate agent will \_\_\_\_\_

in ascending order on the field \_\_\_\_\_ .

**2****[Turn over**

## 4. Paints R Us make paint to sell in its own stores.

(a) The company has decided to automate all parts of the production of the paint and the paint containers.

- (i) The paint is sold in metal tins. An automated system is used to make the tins.

State **one** reason why the company use an automated system for this job.

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1

- (ii) Poisonous fumes are produced during the production of the paint. State **one** reason why an automated system is used in this case.

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1

(b) Paints R Us use robots to pack the tins of paint and move them to the stockroom.

Use some of the words below to complete the following sentences.

*stationary      mobile      motor      feedback      interface*

- (i) A robot which can move around the factory is called a

\_\_\_\_\_ robot.

1

- (ii) Data sent from a sensor to a computer is called

\_\_\_\_\_.

1

- (iii) A robot moves because its parts are moved by a

\_\_\_\_\_.

1

## 4. (continued)

- (c) Robots can have *tools* added to their arms to allow them to do a variety of tasks.

Using the words below match the correct tool with the task.

*gripper*                      *suction pad*                      *ladle*

Use each word only **once**.

| Task                         | Tool |
|------------------------------|------|
| Moving hot liquid            |      |
| Moving a metal rod           |      |
| Moving a large pane of glass |      |

- (d) Each tin of paint has a *barcode* printed on the tin.

What two items of information will the barcode contain?

Tick (✓) **two** boxes only.

|                        |                          |
|------------------------|--------------------------|
| Price                  | <input type="checkbox"/> |
| Item code              | <input type="checkbox"/> |
| Country of Manufacture | <input type="checkbox"/> |
| Use By Date            | <input type="checkbox"/> |

- (e) State **two** reasons for entering data using a barcode.

1 \_\_\_\_\_  
 \_\_\_\_\_

2 \_\_\_\_\_  
 \_\_\_\_\_

[Turn over

3

2

2

**4. (continued)**

The company use a *mainframe* computer to store information about sales and stock.

- (f) State **two** reasons why Paints R Us use a mainframe computer.

- (g) The mainframe computer is linked to *terminals* in stores all over the country.

What **two** items of hardware make up a terminal?

5. (a) Bass Rock insurance company has a large office in Edinburgh.

The company connect their computers to a LAN.

- (i) What do the letters LAN stand for?

One word has been completed for you.

L \_\_\_\_\_ A \_\_\_\_\_ Network

- (ii) Apart from communication state **two** reasons why companies would use this type of network.

1 \_\_\_\_\_

2 \_\_\_\_\_

- (b) Most company workers use *Internet Ready Computers*.

State **one** hardware item and **one** software item that an Internet Ready Computer requires.

Hardware item: \_\_\_\_\_

Software item: \_\_\_\_\_

- (c) Bass Rock employees use various methods of communication.

State **two** methods of electronic communication they would use.

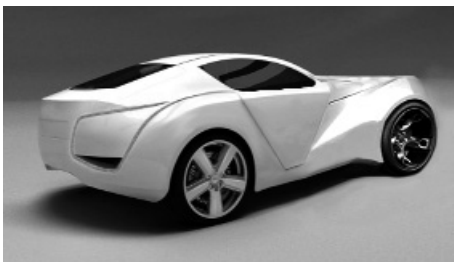
1 \_\_\_\_\_

2 \_\_\_\_\_

[Turn over

| KU | PS |
|----|----|
| 2  |    |
|    | 2  |
|    | 2  |
|    | 2  |
|    |    |

6. Portonian Cars are launching a new model of car and want to send an invitation to all of its customers to the launch.



- (a) The invitations are typed using a *template* from a Desk Top Publishing package.

What is a “template”?

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1

- (b) The manager decides that the graphic is on the wrong side of the invitation.

How could the secretary use the software to make this change?

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1

- (c) In order to edit the invitation the secretary will have to carry out five steps to make the changes to the invitation.

Enter the numbers 1, 2, 3 and 5 in the table below to show the order she must use to make the changes.

| Step                | Order |
|---------------------|-------|
| Print invitation    |       |
| Edit invitation     |       |
| Load program        |       |
| Save invitation     | 4     |
| Open the invitation |       |

4

(d) The secretary has an area on her hard disk called promotions where she will save the invitation.

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**1**

- Which option below is a portrait layout?

\_\_\_\_\_

Diagram illustrating a two-stage process flow:

- Stage 1:** A large rectangle on the left contains 8 horizontal lines. To its right is a small square, followed by a rectangle containing the letter 'A'.
- Stage 2:** A large rectangle in the middle contains 8 horizontal lines. To its right is another small square, followed by a rectangle containing the letter 'B'.

1

- State the type of package that would be used to create a slide show.

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**1**



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