GCSE
INFORMATION AND COMMUNICATION TECHNOLOGY (SHORT COURSE)

Unit 1  Systems and Applications in ICT

Wednesday 18 May 2016       Morning       Time allowed: 1 hour

Materials
• You may use a calculator.

Instructions
• Use black ink or black ball-point pen.
• Fill in the boxes at the top of this page.
• Answer eight questions in total.
• Answer all questions in Sections A and B. In Section C answer either Question 8 or Question 9, which should be answered in continuous prose. In this question you will be marked on your ability to use good English, organise information clearly, and to use specialist vocabulary where appropriate.
• You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
• Do all rough work in this book. Cross through any work you do not want to be marked.

Information
• The marks for questions are shown in brackets.
• The maximum mark for this paper is 60.
**Section A**

**Answer all questions in the spaces provided.**

1  (a) Ann has bought a new desktop computer. Ann has been told by the computer shop manager that she also needs some of the following devices.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Digital projector</td>
</tr>
<tr>
<td>B</td>
<td>Keyboard</td>
</tr>
<tr>
<td>C</td>
<td>Microphone</td>
</tr>
<tr>
<td>D</td>
<td>Mouse</td>
</tr>
<tr>
<td>E</td>
<td>Printer</td>
</tr>
<tr>
<td>F</td>
<td>Speakers</td>
</tr>
</tbody>
</table>

Give **three** of the above that are input devices.  

Write the letters for your answers in the boxes provided.

Answers [ ] [ ] [ ]

1  (b) Which **one** of the following is **not** a type of storage media?  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Actuator</td>
</tr>
<tr>
<td>B</td>
<td>DVD-R</td>
</tr>
<tr>
<td>C</td>
<td>Memory stick</td>
</tr>
<tr>
<td>D</td>
<td>Portable hard disk</td>
</tr>
</tbody>
</table>

Write the letter for your answer in the box provided.

Answer [ ]

1  (c) Describe the difference between hardware and software.  

1  (d) State what is meant by the term ‘e-book’.
2 (a) The list below shows a range of audio/video software features. For each part of this question give the software feature that **best** matches the definition given.

A  Aspect ratio  F  Rendering
B  Backward  G  Start
C  Forward  H  Subtitles
D  Mute  I  Zoom
E  Playlist

Choose your answers from the **list given above**. Write the letter for your answer in the box provided.

2 (a) (i) A feature that translates or transcribes the dialogue and displays captions at the bottom of a screen.

Answer

2 (a) (ii) A feature that contains music or videos selected by a user to be played in a particular order.

Answer

2 (a) (iii) A feature that stops any sound from being heard.

Answer

2 (b) (i) Give **one** advantage of downloading music compared to streaming music.

[1 mark]

__________________________________________________________

2 (b) (ii) Give **two** disadvantages of downloading music compared to streaming music.

[2 marks]

Disadvantage 1  ____________________________________________

__________________________________________________________

Disadvantage 2  ____________________________________________

__________________________________________________________
Star Ascend is a company that sells jewellery. Star Ascend uses desktop publishing software to produce a catalogue for customers. Figure 1 shows the final page of the printed catalogue.

Figure 1

Get in touch! 😊

Here at Star Ascend we would love to hear from our customers, share your feedback! Whatever is on your mind, get in touch, your opinions really matter to us.

Postal Address:
Star Ascend Jewellery
Church Road
Karvingdon
KR10 2AN

Other:
Email:
• starinfo@aqamail.com
Website:
• www.starascend.com
Telephone:
• 01632 224577
Fax:
• 01632 224588

3 (a) Tick one box to show which of the following best describes the feature applied to the section of the catalogue page labelled A in Figure 1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Tick one box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bold and left justification</td>
<td></td>
</tr>
<tr>
<td>Bold and right justification</td>
<td></td>
</tr>
<tr>
<td>Bold and centre</td>
<td></td>
</tr>
<tr>
<td>Underline and columns</td>
<td></td>
</tr>
</tbody>
</table>
3 (b) Tick one box to show which of the following best describes the feature applied to the section of the catalogue page labelled B in Figure 1. [1 mark]

<table>
<thead>
<tr>
<th>Tick one box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoshape</td>
</tr>
<tr>
<td>Font size</td>
</tr>
<tr>
<td>Italic</td>
</tr>
<tr>
<td>Shading</td>
</tr>
</tbody>
</table>

3 (c) Tick one box to show which of the following best describes the feature applied to the section of the catalogue page labelled C in Figure 1. [1 mark]

<table>
<thead>
<tr>
<th>Tick one box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullets</td>
</tr>
<tr>
<td>Sub numbering</td>
</tr>
<tr>
<td>Ungrouping</td>
</tr>
<tr>
<td>Word count</td>
</tr>
</tbody>
</table>

3 (d) Tick one box to show which of the following best describes the feature applied to the section of the catalogue page labelled D in Figure 1. [1 mark]

<table>
<thead>
<tr>
<th>Tick one box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drag and drop</td>
</tr>
<tr>
<td>Footer</td>
</tr>
<tr>
<td>Sub heading</td>
</tr>
<tr>
<td>Tabs</td>
</tr>
</tbody>
</table>

3 (e) Describe the difference between word processing and desktop publishing software. [2 marks]

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
The Eastmond Cricket Club secretary uses a data capture form to collect information from members. Some of the field names are missing from the incomplete design shown below.

**Eastmond Cricket Club**

- Last name
- First name
- Address 1
- Address 2

(i) E A _ _ _ _
(ii) (01632) _ _ _ _
(iii) _ _ / _ _ / _ _

4 (a) Give the most suitable field names for each of the three fields below.

[3 marks]

Field (i) 
Field (ii) 
Field (iii) 

4 (b) Name two types of data collection/capture methods, other than a data capture form.

[2 marks]

Method 1 
Method 2 

4 (c) The Eastmond Cricket Club secretary enters the data from a data capture form into a database of members. He uses this database to produce reports which are sent to members. Give one advantage of producing reports in this way.

[1 mark]
A group of Year 11 students are planning to give a presentation to Year 7 students as part of a project on Internet safety. One of their slides is shown below.

The Golden Rules of Internet Safety

- Don’t meet up with strangers you have chatted with online
- Don’t use your real name
- Don’t tell people which school you go to
- Use strong passwords for your social networking accounts
- Don’t make inappropriate comments

5 (a) Give three features that could be included on the slide to improve the presentation for Year 7 students.

[3 marks]

Feature 1

Feature 2

Feature 3

5 (b) The Year 11 students are keen to make sure the Year 7 presentation is fit for purpose. Describe what is meant by the term 'fit for purpose'.

[2 marks]

__________________________________________

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Section B

Answer all questions in the spaces provided.

6 PlasticStyle is a global online shopping website selling clothing for children aged 3–16 years. PlasticStyle staff use database software to manage stock sold through the online catalogue. Figure 2 is an example of an input form used by PlasticStyle.

Figure 2

6 (a) One common feature of database software is a 'switchboard'. Explain what is meant by the database term 'switchboard'.

[2 marks]

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
6 (b) Give two advantages to PlasticStyle staff of using input forms to enter and edit data, rather than entering data directly into a database table. [2 marks]

Advantage 1 ____________________________________________________________

Advantage 2 ____________________________________________________________

6 (c) The growth in the use of ICT has made business globalisation possible. Describe the advantages to society from the development of globalised business activity. [5 marks]

______________________________________________________________________

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______________________________________________________________________

______________________________________________________________________

Turn over for the next question
Students at a school are carrying out a project on the use of mobile computing. The students are using linked worksheets within a spreadsheet to record which use is the most common.

**Figure 3** shows the overall use by six anonymous students.

**Figure 3**

<table>
<thead>
<tr>
<th>Use of Mobile Computing</th>
<th>Time Spent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student A</td>
</tr>
<tr>
<td>Social Networking</td>
<td>26</td>
</tr>
<tr>
<td>Communication</td>
<td>23</td>
</tr>
<tr>
<td>Productivity</td>
<td>17</td>
</tr>
<tr>
<td>Games</td>
<td>11</td>
</tr>
<tr>
<td>Entertainment</td>
<td>11</td>
</tr>
<tr>
<td>Shopping</td>
<td>6</td>
</tr>
<tr>
<td>News</td>
<td>6</td>
</tr>
</tbody>
</table>

7 (a) (i) In **Figure 3**, give the cell range of the time spent by Student B on the use of mobile computing.

[1 mark]

**Figure 4** shows Student B’s worksheet linked to the Overall sheet.

**Figure 4**

<table>
<thead>
<tr>
<th>Total Mobile Computing Hours</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Networking</td>
<td>2.6</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
</tr>
<tr>
<td>Productivity</td>
<td>0.5</td>
</tr>
<tr>
<td>Games</td>
<td>1.5</td>
</tr>
<tr>
<td>Entertainment</td>
<td>1</td>
</tr>
<tr>
<td>Shopping</td>
<td>0.5</td>
</tr>
<tr>
<td>News</td>
<td>0</td>
</tr>
</tbody>
</table>
7 (a) (ii) Tick **one** box to show the formula that has been used in cell C3 in **Figure 3** to link the Social Networking percentage time for Student B shown in **Figure 4**. 

<table>
<thead>
<tr>
<th>Tick <strong>one</strong> box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp;=‘Student B’!C4</td>
</tr>
<tr>
<td>&amp;=‘Student B’!C5</td>
</tr>
<tr>
<td>&amp;=‘Student B’!D5</td>
</tr>
<tr>
<td>&amp;=‘Student C’!C5</td>
</tr>
</tbody>
</table>

1 mark

7 (b) **Figure 5** shows a breakdown of the uses of mobile computing.

7 (b) (i) Name the type of chart shown in **Figure 5**.

[1 mark]

7 (b) (ii) Give **one** feature that could be used to improve the understanding of the information displayed in the chart shown in **Figure 5**.

[1 mark]
7 (c) Describe the advantages to a user of creating their own personal website rather than using websites within social networking accounts. [5 marks]
## Section C

You should answer **either** Question 8 or Question 9, but **not** both.

You will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate.

<table>
<thead>
<tr>
<th>Either</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

[12 marks]

This space is available for planning your answer, if you wish to use it.
Or

9 Discuss how potential health problems, related to prolonged use of ICT in the workplace, can be minimised. [12 marks]

This space is available for planning your answer, if you wish to use it.
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