**Mock Exam Paper April 2015**

**Level 1/2 CAMBRIDGE NATIONAL IN ICT**

R001 Understanding Computer Systems

Candidates answer on the question paper.

**OCR supplied materials:**

None

**Other materials required:**

None

 **Duration:** 1 hour

**INSTRUCTIONS TO CANDIDATES**

• Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.

• Use black ink. HB Pencil may be used for graphs and diagrams only.

• Read each question carefully. Make sure you know what you have to do before starting your answer.

• Write your answer to each question in the space provided. Additional paper may be

used if necessary but you must clearly show your candidate number, centre number and question number(s).

• Answer **all** the questions.

**INFORMATION FOR CANDIDATES**

• The number of marks is given in brackets **[ ]** at the end of each question or part question.

• The total number of marks for this paper is **60**.

• This document consists of 10pages. Any blank pages are indicated.

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## **Section A**

**The questions in this section are based on scenario 1 in the case study and your   
background research.**

Answer **all** questions.

1. Illustrators and animators at Animated World Books use a range of different input and output devices to create their graphics and animations.
   1. In the table below indicate whether each device is used for input or output by ticking the correct column. The first one has been completed for you. **[3]**

|  |  |  |
| --- | --- | --- |
| Device | Used for input | Used for output |
| Mouse |  |  |
| Screen |  |  |
| Printer |  |  |
| Touchpad |  |  |

* 1. In a project meeting, graphics that have been created on an illustrator’s laptop need to be shared with a whole room of team members.   
     Suggest **one** output device that would be suitable to do this.

|  |  |
| --- | --- |
|  | **[1]** |

* 1. Some illustrators use a graphics tablet as well as a mouse as an input device.   
     Explain why they might prefer a graphics tablet for drawing.

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|  | **[2]** |

1. Catherine, based in England, and Richard, who has travelled to South Africa, are working together to write the script for a new cartoon called “Buzz Boy”.  
   Richard and Catherine both have computers which are connected to the internet.  
   Richard would like Catherine to check the draft of a chapter he has written in word processing software.
   1. Describe **one** method which could be used to transfer the chapter from Richard’s computer to Catherine’s via the internet.

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|  | **[2]** |

* 1. State **two** ways that a word processed document could be protected from unauthorised editing.

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|  | **[2]** |

* 1. Catherine needs to provide feedback about the chapter to Richard.   
     Describe **two** features of word processing software that Catherine could use to provide Richard with feedback

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|  | **[2]** |

* 1. Catherine would like to use an internet-based video conferencing service to speak with Richard.  
     State **one** device that would be needed to take part in this video conference, for each of the following requirements. **[5]**

|  |  |
| --- | --- |
| **Requirement** | **Device** |
| Voice input |  |
| Moving image input |  |
| Voice output |  |
| Moving image output |  |
| Connectivity |  |

1. Catherine is investigating the use of a mobile app to advertise Animated World Books’s new projects.
   1. Android and iOS are two examples of mobile phone Operating Systems.   
      Explain why an operating system is required on a smartphone.

|  |  |
| --- | --- |
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|  | **[2]** |

* 1. Describe how a mobile app could be installed on a smartphone.

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|  | **[2]** |

* 1. Suggest **two** features Animated World Books could include in a mobile app to advertise new products.

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|  | **[2]** |

1. Catherine has heard there can be some negative effects from overuse of ICT equipment.

Give **two** different negative health effects from overuse of ICT and ways that this effect can prevented or reduced. [6]

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|  | **[6]** |

## **Section B**

**The questions in this section are based on scenario 2 in the case study and your   
background research.**

Answer **all** questions.

1. Richard has a user form on his website which customers can fill in and submit if they want to purchase some artwork.
   1. Complete the table below to describe the purpose of each user form feature.  
      The first line has been completed for you. **[4]**

|  |  |
| --- | --- |
| **User form feature** | **Describe one purpose of this feature** |
| Button | A user can click this to submit the information that has been added. |
| Radio button |  |
| Text field |  |

* 1. Explain why the use of validation could improve the effectiveness of the data that is submitted on these forms.

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|  | **[2]** |

1. In order to order artwork from Richard’s website, customers will need to connect to the internet.
   1. What type of software would be needed to view webpages?

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| --- | --- |
|  | **[1]** |

* 1. State **two** file types suitable for a still image of a cartoon.

|  |  |
| --- | --- |
|  | **[2]** |

* 1. When customers use a computer to access the internet, state **one** output device needed to view a webpage when ordering artwork

|  |  |
| --- | --- |
|  | **[1]** |

* 1. When customers use a computer to access the internet, state **one** output device needed to produce a paper copy of the order.

|  |  |
| --- | --- |
|  | **[1]** |

* 1. When making an order, customers will be asked to provide and email address.

Explain why Richard might want to collect a customer’s email address.

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|  |  |
|  | **[2]** |

* 1. Name the Act which places limits on how Richard can use personal data such as an email address.

|  |  |
| --- | --- |
|  | **[1]** |

* 1. Customers will be required to make a payment for the artwork they want to purchase. The data required to make these payments will be transferred using encryption technology.  
     Describe how data encryption can be used to transfer this data securely.

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|  | **[3]** |

1. Richard takes a photograph on his smartphone to share on social media using the internet.
   1. Identify two input devices that Richard can use to enter information onto a smartphone.

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|  | **[2]** |

* 1. State **one** connectivity device that is necessary for this.

|  |  |
| --- | --- |
|  | **[1]** |

* 1. Describe **one** way that Richard could transfer the photograph to his laptop computer to edit it, without using the internet.

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|  | **[2]** |

* 1. Explain how Richard might use social media to share the image with only his colleagues from Animated World Books.

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|  | **[2]** |

1. Richard is producing a plan for a new chapter of a book called “Buzz Boy”. The ideas include photographs he has taken on his smartphone of locations to base the story on.
   1. Richard wants to edit the photographs he has taken.  
      State one type of software that is most suitable for editing images.

|  |  |
| --- | --- |
|  | **[1]** |

* 1. Richard needs to store a wide range of images on his computer, so that he can use them at a later date.  
     State **two** factors that Richard should consider when storing the information on his computer.

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| --- | --- |
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|  | **[2]** |

1. Richard will design the front cover for “Buzz boy”.
   1. Richard would like to use an image he has found on the internet as the background for the cover  
      Identify the Act that protects the rights of the artist who created the original image that Richard wants to use.

|  |  |
| --- | --- |
|  | **[1]** |

* 1. Give **three** actions that Richard must take before he can legally use the image.

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| --- | --- |
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|  |  |
|  |  |
|  |  |
|  | **[3]** |

**END OF QUESTION PAPER**