



Please write clearly in block capitals.

Centre number

--	--	--	--	--

Candidate number

--	--	--	--

Surname

Forename(s)

Candidate signature

AS

INFORMATION AND COMMUNICATION TECHNOLOGY

Unit 2 Living in the Digital World

Tuesday 14 June 2016

Afternoon

Time allowed: 1 hour 30 minutes

Instructions

- Use black ink or black ball-point pen. Use pencil only for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- 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 80.
- Question 7 should be answered in continuous prose.
- In this question you will be marked on your ability to use good English, organise information clearly and use specialist vocabulary where appropriate.



J U N 1 6 I N F 0 2 0 1

IB/M/Jun16/E3

INFO2

Section A

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

1 Below is a list of current legislation and regulations which relate to the use of ICT.

- A** Data Protection Act
- B** Copyright Designs and Patents Act
- C** Computer Misuse Act
- D** Waste Electrical and Electronic Equipment WEEE Directive
- E** Freedom of Information Act
- F** Regulation of Investigatory Powers Act

For each part of the question, write the letter of the legislation that best matches the definition in the box given.

Choose your answer from the list above.

1 (a) Makes unauthorised access to computer material illegal.

[1 mark]

Answer

1 (b) Governs the protection of personal data.

[1 mark]

Answer

1 (c) Allows certain public organisations to monitor people's Internet activities.

[1 mark]

Answer

1 (d) Makes it illegal to use pirated software.

[1 mark]

Answer

4



2

What is ICT?

[4 marks]

4

Turn over for the next question



Turn over ►

3 (a) Using an example, define the term data.

[2 marks]



3 (b) Explain, using examples, how data can arise.

[6 marks]

8

Turn over for the next question



Turn over ▶

12

Turn over for the next question



Turn over ►

5 A modern trend is to design ICT systems that can be worn, for example watches, glasses or items of clothing.

Read the article below.

Smartwatches

Smartwatches will be in on the health and fitness tracking game in 2015. Most Google smartwatches have heart rate monitors and the Apple Watch will have one too.

Collecting all that data is useless if users can't do anything with it, though. Google, Microsoft and Apple announced free health-tracking services this year, each aiming to help users understand their health data.

Smartclothing

Clothing brands such as Adidas, Under Armour and Ralph Lauren, which showed off its new smartshirt at the US Open tennis tournament, are starting to make sports tops with built-in heart-rate and respiration monitoring.

Smartshirts can measure things like heart rate and respiration much more accurately and without having to wear another device, because they can embed more sensors across a larger area.

Smartsocks, motion tracking underwear and light reactive jackets that glow the harder you train are in the pipeline.

Fitness is just one area being explored by smartclothing, with manufacturers envisaging GPS shoes, colour changing ties and smartphone charging jackets.

Even beachwear could go smart with bracelets that track your desired tan level and swimwear that changes colour when you have had enough sun.

All ICT systems require an interface to allow humans to interact with them.

The article above refers to some wearable ICT systems.

Describe the characteristics and requirements of users that need to be considered when designing the interaction between users and these wearable ICT systems.

[10 marks]



A large rectangular box containing 25 horizontal lines for writing.

10



Turn over ►

6 A family currently has three stand-alone computer systems which they want to connect together to allow access to the Internet and World Wide Web.

6 (a) Explain, with reasons, what other elements would be needed to achieve this access.

[8 marks]



- 6 (b) Apart from access to the Internet and World Wide Web, describe further benefits that the family could gain by connecting the stand-alone computers together?

[6 marks]



6 (c) Explain the need for standards when transferring data across ICT networks.

[4 marks]



6 (d) Explain the differences between the World Wide Web and the Internet.

[4 marks]

22

Turn over for the next question



A large rectangular area containing 25 horizontal lines for writing.

20

END OF QUESTIONS



There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Copyright Information

For confidentiality purposes, from the November 2015 examination series, acknowledgements of third party copyright material will be published in a separate booklet rather than including them on the examination paper or support materials. This booklet is published after each examination series and is available for free download from www.aqa.org.uk after the live examination series.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and AQA will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team, AQA, Stag Hill House, Guildford, GU2 7XJ.

Copyright © 2016 AQA and its licensors. All rights reserved.

