



Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2015

Centre Number

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Candidate Number

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Information and Communication Technology

Assessment Unit AS 1

assessing

Module 1: Components of ICT



AP111

[AP111]

TUESDAY 23 JUNE, MORNING

TIME

2 hours.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

You must answer the questions in the spaces provided.

Do not write outside the boxed area on each page or on blank pages.

Complete in blue or black ink only. **Do not write with a gel pen.**

Answer **all seven** questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 120 including a maximum of 5 for quality of written communication.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.



1 The following diagram represents a bar code found on a book.

ISBN 0-123456-78-9



(a) Explain how data is read by a barcode reader.

[3]

(b) By referring to this diagram, explain what is meant by

Data _____

Information _____

[4]



2 A laptop computer has a keyboard and a touch sensitive pad.

(a) Identify and justify one use for which the touch sensitive pad would be more suitable than the keyboard.

Use _____

Justification _____

_____ [2]

(b) The computer has a touch screen.

Describe the main features of touch screen technology.

_____ [5]

(c) Identify and justify a storage device which would be suitable for backing up data on a laptop computer.

Device _____

Justification _____

_____ [2]





3 A business decides to introduce a new payroll system.

(a) (i) Describe **two** advantages of custom-built software compared to off-the-shelf software.

1. _____

2. _____

[4]

(ii) Describe **two** disadvantages of custom-built software over off-the-shelf software.

1. _____

2. _____

[4]

[Turn over



The business chooses an off-the-shelf package.

(b) Explain why an off-the-shelf package might be the better choice in the case of payroll software.

[2]

(c) The software has been tested.

Describe each of the following types of testing.

Application testing _____

Acceptance testing _____

[6]



(d) User documentation is provided for the payroll package.

Describe **three** of the contents of user documentation.

1. _____

2. _____

3. _____

[6]

[Turn over



4 A computer uses a stock control system.

(a) Describe **three** ways in which this computer could use RAM.

1. _____

 2. _____

 3. _____

- [6]

(b) State and justify one way in which ROM is used.

Use _____

Justification _____

[2]



When keying in stock details, an employee enters a quantity as **915** instead of **195**.

(c) Name and describe the type of error which has occurred.

Error _____

Description _____

_____ [2]

(d) Name and describe **two** ways in which this error might be detected by data verification.

1. Name _____

Description _____

2. Name _____

Description _____

_____ [6]

[Turn over



(e) Describe one way in which this error might be detected by data validation.

[2]





5 Computer networks are essential for modern communication.

(a) Explain how data travels from one computer to another on each of the following networks.

Bus _____

Ring _____

[6]

[Turn over



(b) Describe the main features of a bus/star composite network.

[4]



(c) Explain how each of the following is used in network communication.

An IP address _____

A gateway _____

Proxy server _____

[9]

[Turn over



6 Pupils at a school complete a multiple choice test. The completed tests are entered into a database using OMR technology.

(a) Describe the main features of OMR.

[4]

(b) Describe **two** reasons why OMR is a suitable method of data entry **in this case**.

1.

2.

[4]



(c) The database of test results must be kept secure.

Name and describe **two** methods which can be used to keep data secure.

Name _____

Description _____

Name _____

Description _____

_____ [8]

[Turn over



(c) Describe the main features of batch processing.

[4]

Customers make secure payments using PayPal.

(d) Describe the main features of PayPal.

[4]

[Turn over



(e) Name and describe one other method of making secure on-line transactions.

Name _____

Description _____

[4]

THIS IS THE END OF THE QUESTION PAPER





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For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
QWC	

Total Marks	
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Examiner Number

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