



Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
January 2013

Centre Number

--	--	--	--	--

Candidate Number

--	--	--	--

**Information and
Communication Technology**
Assessment Unit AS 1
assessing
Module 1: Components of ICT
[AW111]
THURSDAY 17 JANUARY, MORNING



AW111

TIME

2 hours.

INSTRUCTIONS TO CANDIDATES

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

Write your answers in the spaces provided in this question paper.

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

Answer **all five** questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 120 marks 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.

7783.04R



1 Guests attending an ICT convention are asked to fill in claims forms for expenses.

Details from these forms are keyed into a database.

The database is then used to produce an invitation list for the next year's convention.

(a) Describe **three** reasons why the information in the invitation list might not be correct.

1. _____

2. _____

3. _____

_____ [6]

Examiner Only

Marks Remark

7783.04R



(b) Explain what is meant by each of the following in this case.

A direct data source

(i) _____

_____ [2]

An indirect data source

(ii) _____

_____ [3]

(c) Describe one benefit and one drawback of using an indirect data source.

Benefit _____

Drawback _____

_____ [4]

Examiner Only	
Marks	Remark

[Turn over



- 2 A stock control system includes a CUSTOMER table. The details held in this table about a particular customer are shown below.

CustomerID	CustomerName	Telephone	Address
34568	Black	42424224	Belfast

- (a) By referring to the table, explain what is meant by

Data _____

Information _____

_____ [4]

- (b) Explain the purpose of the CustomerID.

_____ [2]

Examiner Only	
Marks	Remark



The stock control system uses data verification and data validation.

Examiner Only	
Marks	Remark

(c) Describe **two** methods of data verification.

1. _____

2. _____

_____ [4]

(d) The CustomerID **34568** is keyed in as **43568**.

(i) Name and describe the type of data entry error which has occurred.

Name _____
Description _____ [2]

(ii) Explain how this error will be detected if the CustomerID includes a modulus 11 check digit.

_____ [4]

[Turn over



DO NOT WRITE ON THIS PAGE
(Questions continue overleaf)

7783.04R

[Turn over



3 (a) Describe the purpose of each of the following CPU components.

The arithmetic and logic unit _____

The control unit _____

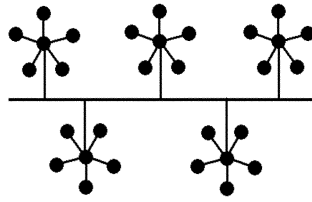
Cache memory _____

[6]

Examiner Only	
Marks	Remark



A university's network has the following topology:



© D Fallis, CCEA

Examiner Only

Marks	Remark

(b) Name this topology and describe its main features.

Name _____

Description _____

_____ [4]

(c) The university is working with universities from around the world on an ICT project.

A video conference is planned to review the project's progress.

(i) Explain **four** benefits of using a video conference for this review.

1. _____

2. _____

3. _____

4. _____

_____ [4]



(ii) Describe how e-mail could be used to inform lecturers about the video conference.

[6]

Examiner Only	
Marks	Remark

7783.04R



(d) The university is a member of the International Telecommunication Union (ITU).

Explain the purpose of the ITU.

[4]

Examiner Only	
Marks	Remark



4 A company sells health products at a number of shops throughout the country.

(a) An ICT consultant recommends that the company should develop a website.

(i) Describe **two** benefits to the company of using the website to sell its products.

1. _____

2. _____

[4]

(ii) Explain how a customer could use the website to obtain details about a particular health product.

[4]

Examiner Only

Marks Remark





(iii) Describe the main features of HTML.

[4]

(b) The company currently uses batch processing to process orders.

(i) Describe the main features of batch processing.

[4]

Examiner Only	
Marks	Remark





5 An organisation requires a new information system.

(a) A feasibility study is carried out.

Explain what is meant by

Legal feasibility _____

Social feasibility _____

_____ [4]

(b) Name and describe **two** different methods of fact finding.

Name _____

Description _____

Name _____

Description _____

_____ [6]

Examiner Only

Marks

Remark

[Turn over

7783.04R



(d) Describe the role of the programmer during software development.

[3]

(e) The information system was developed using open source software. Explain what is meant by open source software.

[3]

Examiner Only	
Marks	Remark

[Turn over





DO NOT WRITE ON THIS PAGE

7783.04R



DO NOT WRITE ON THIS PAGE

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

Total Marks	
--------------------	--

Examiner Number

Permission to reproduce all copyright material has been applied for.
In some cases, efforts to contact copyright holders may have been unsuccessful and CCEA will be happy to rectify any omissions of acknowledgement in future if notified.

113627

