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**Candidate Number** 

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ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2013

# Information and Communication Technology

Assessment Unit AS 1
assessing
Module 1: Components of ICT
[AP111]



**TUESDAY 11 JUNE, AFTERNOON** 

### TIME

2 hours, plus your additional time allowance.

## **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.

Answer all six 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.

8833.05 ML

Depai	rtment	Target Sales (£)	Actual Sales (£)	
Men		15 000	12341	
Wome	en	20 000	21304	
Child	ren	10 000	10312	
a) (i)		able. rm data.		
	Explain the te	rm <b>information</b> .		
(ii)	Refer to the fi			
(ii)			artment.	[4]
(ii)	Explain the te	gures for the Men's Depa	artment.	[4]
(ii)	Explain the te	gures for the Men's Depa	artment.	[4]
(ii)	Explain the te	gures for the Men's Depa	artment.	[4]
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(ii)	Explain how verification can be used to detect errors.	Examir Marks	ner Only Remark	
	[3]			
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	The product code for a particular item is <b>45667</b> , where <b>7</b> is the modulus 11 check digit.	Examine Marks	er Only Remark
	Show how this check digit is calculated.		
	[6]		
		Total Qu	estion 1
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2	One	e of the main components of the CPU is internal memory.		Examin Marks	er Only Remark
	(a)	Explain how each of the following is used in a typical computer.			
		ROM			
		RAM			
			[4]		
	(b)	Name and describe <b>two</b> of the other main components of the CPU.			
	(6)	Name			
		Description			
		Name			
		Description			
			[6]		
				Total Qu	estion 2
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						_
3	A h	otel	has a number of interactive terminals for use by guests.	Examin Marks	er Only Remark	
	(a)	Eac	ch terminal can be used to access the Internet.			
		(i)	Describe the main features of a typical web browser.			
			[4]			
		(ii)	Describe the main features of a typical search engine.			
		( )				
			[4]			
8833	3.05 <b>ML</b>			[Tur	n ovei	5

The	hotel guests can access the terminals using speech input.		Examin Marks	er Only Remark
(b)	Identify <b>two</b> hardware components required specifically for speech input.			
	1			
	2	[2]		
(c)	Identify <b>two</b> software components required specifically for speech input.			
	1			
	2	[2]		
(d)	Identify <b>two</b> benefits and <b>two</b> drawbacks of using speech input.			
	Benefits			
	1			
	2			
	Drawbacks			
	1			
	2			
		[4]		

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(e)	The speech input application was developed using open source software.	Examin Marks	er Only Remark
	Explain what is meant by <b>open source software</b> .		
	[4]		
		Total Qu	estion 3
		[Tur	n over
8833.05 <b>ML</b>		[.4.	

4	A c	ompany's LAN is connected to the Internet.	Examiner O Marks Rei	nly mark
	(a)	Name and describe <b>two</b> different types of LAN topology.		
		Name		
		Description		
		Name		
		Description		
		[6]		
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(b)	Explain the purpose of each of the following network resources.	Examin	er Only
(D)		Marks	Remark
	Switch		
	Proxy server		
	[6]		
		[Tur	n over
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( ) T				
(c) 10	CP/IP is the main communication protocol used on the Internet.		Examine Marks	Remark
(i)	Explain what is meant by a <b>communications protocol</b> .			
		[3]		
(ii	Describe the main features of the IP part of this protocol.			
		[3]		
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(d)	Give <b>two</b> reasons why the company should consider selling its products using the Internet.	Examiner Only  Marks Remark
	1	
	2	
	[4]	
		Total Question 4
0000 05 ***		[Turn over
8833.05 <b>ML</b>		

5	An	organisation introduces a new database system.		Examin Marks	er Only Remark
	(a)	During the development of the system, a feasibility study was carried out.	ed		
		Explain what is meant by <b>social feasibility</b> .			
			[3]		
	(b)	Describe what happens during the design stage of an ICT system.			
			<sub>-</sub> [6]		
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(c)	The information system was tested.	Examin Marks	er Only Remark	
	Describe the main features of:			
	Application testing			
	Acceptance testing			
	[6]			
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(		e <b>two</b> advantages of a custom-built system over an helf system.		Examine Marks	er Only Remark
	1				
	2				
(	e) Explain v	what happens during system changeover.	- [.]		
`					
			- [ - ]		
				Total Que	estion 5
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6	EF	TPOS technology is used extensively in supermarkets.	Examin Marks	er Only Remark	
	(a)	Describe the main features of EFTPOS technology.			
				1	
				1	
		[4]			
				1	
				1	
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(b)	Describe one benefit and one drawback of this use of EFTPOS for:	_	Examine Marks	r Only Remark
	The supermarket			
	Benefit			
	Drawback			
	Customers			
	Benefit			
	Drawback			
	[8]			
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Sup	permarkets use RFID technology.	Examiner Only  Marks Rema
(c)	Describe the main features of RFID technology.	
(d)	Describe one advantage of using RFID instead of barcode for stock control.	
	[2]	
_	THIS IS THE END OF THE QUESTION PAPER	Total Question  Quality of writt communication

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For Examiner's use only		
Question Number	Marks	
1		
2		
3		
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Total Marks

**Examiner Number** 

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