

Centre Number

Candidate Number

l	1	l

ADVANCED SUBSIDIARY (AS) General Certificate of Education January 2014

Information and Communication Technology

Assessment Unit AS 1 assessing Module 1: Components of ICT



[AP111]

AP111

FRIDAY 17 JANUARY, MORNING

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 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.

8452



1		olicants for house insurance provide information about their property apleting an on-line form.	/ by	Examiner (Only emark
	(a)	Explain how this form can be used as:			
		A direct data source			
		An indirect data source			
			_ [4]		
	(b)	Describe one benefit and one drawback of using an indirect data source.			
		Benefit			
		Drawback			
			_ [4]		
8452					

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning C. 20 7 Learning G. DED 1 Learning G. Rewards T Learning G. 20 G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 7 Learning G. 20 Learning G. 20 G. D Learning G. DE LEAVING G. 20 G. 20 G. 20

Remarks



The on-line form includes both data validation and data verification. (c) Apart from the use of a check digit, name and describe three different types of data validation. Name					
types of data validation. Name Description Name Description Name Description [6] (d) Explain the purpose of data verification.		The	on-line form includes both data validation and data verification.		er Only Remark
Description Name Description Name Description [6] (d) Explain the purpose of data verification.		(c)			
Name Description Name Description			Name		
Name Description Name Description [6] (d) Explain the purpose of data verification			Description		
Name					
Name					
[6] (d) Explain the purpose of data verification					
(d) Explain the purpose of data verification. [2]			Description		
[2]			[6]		
[2]		(d)	Explain the purpose of data verification.		
. ITurn ov			[2]		
. Turn ov					
. Turn ov					
. ITurn ov					
. ITurn ov					
8452	8452			[Tur	n over



_				
	(e)	When the form is complete the user is given a reference number. The last digit of this number is a modulus-11 check digit.	Examin Marks	er Only Remark
		Showing all your working , state whether or not 12343 is a valid reference number.		
		[5]		
			Total Qu	uestion 1

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning G: DE LEGATIONS G. DED 1 Learning G. DO J. Learning G. 20 7 Learning G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 7 Learning G. 20 Learning G. 20 G. D Learning G. D Learning G. 20 G. 20 G. 20

Remarks

Remarking

J. Learning

Romarking

J. Learning



8452

	college lecturer uses an interactive whiteboard to present a lesson to dents.	Examin Marks	er Or Ren
(a)	Describe the main features of an interactive whiteboard.		
	[4]		
(b)	The lecturer saves a copy of the lesson on a USB memory pen.		
	Identify three features of a memory pen which make it suitable for this purpose.		
	1		
	2		
	3		
	[3]		
5 0		[Tur	n o
52			

Reactory I

Reacto



(c)	Describe the main features of OMR.	
	[4]	
(d)	Describe two benefits of using OMR in this case .	
	1	
	I	
	2	
	2	
	2	
	2	
	2	

Research

Parties

Research

Researc

Research To Learning

Research

Research

Research

Research

Research

Research

G. 20 Loaming G. 20 Learning G. 20 1 Learning G. 20 Learning Q. 20 G. D Learning G. D 7 Learning G. 20 G. 20 G. 20

Remarder 200



The	college uses a multi-user operating system.		Examin Marks	er Only Remark
(e)	Explain the purpose of an operating system.			
(f)	Describe the main features of a multi-user operating system.			
		[4]		
			Total Qu	uestion 2
			[T	n eur
			Į1ur	n ove



3	Two	network topologies are the bus and the star.	Examin Marks	er Only Remark
	(a)	Describe how data is transferred on each of these networks.		
		Bus network		
		Star network		
		[6]		
8452				

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning G: DE LEGATIONS G. DED 1 Learning G. DO J. Learning G. 20 7 Learning G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 7 Learning G. 20 Learning G. 20 G. D Learning G. D 7 Learning G. 20 G. 20 G. 20

Remarks



(b)	Explain why a communications protocol is necessary when data is transferred between computer networks.	Examin Marks	er Only Remark
		_	
		_	
		_	
		_	
		_	
		_	
		_	
	[4	4]	
8452		[Tur	n over
U 102			

Remarkery I

Remar



;)	Describe how each of the following are used on a network.	Examin Marks	ıe
	A hub		
	A proxy server		
	An IP address		
	[9]		
	[∾]		

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning C. 20 7 Learning G. DED 1 Learning G. Rewards T Learning G. 20 7 Learning G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 1 Learning G. 20 Learning G. 20 G. D Learning G. D 7 Learning G. 20 G. 20 G. 20 G. D Loaving



	(d)	Describe the main features of Bluetooth technology.	Examin Marks	er Only Remark
		[4]		
	(e)	Explain why fibre optic cable is suitable for use in data communication.		
		[3]		
			Tatal O	
			Total Qu	IESHON 3
			Tur	n over
8452			[5761

Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Reading |
Readin



4	A h	ealth centre makes extensive use of ICT.	Examin Marks	er Only Remark
	(a)	The centre manager uses a spreadsheet for financial planning.		
		Describe the main features of spreadsheet software which make it suitable in this case .		
		[6]		

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning G: DE LEGATIONS G. DED 1 Learning G. DO J. Learning G. 20 7 Learning G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 7 Learning G. 20 Learning G. 20 G. D Learning G. D 7 Learning G. 20 G. 20 G. 20

Remarks



	health centre uses a range of measures to keep data secure. Identify three reasons why passwords may not be effective.		Examin Marks	Rer
(-)	1			
	2			
	2			
	3			
(c)	Explain how access rights could be used to keep patient records secure.			
		_ [4]		
		L	[Tur	

Reacting |
Particular |
Particu



			_
(d)	Staff at the health centre must comply with ICT legislation.	Examir Marks	ner Only Remai
	Name and describe the main features of two Acts specifically relating to ICT.		
	Name of Act		
	Description		
	Name of Act		
	Name of Act		
	Description		
	[8]		
			<u> </u>

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning G: DE LEGATIONS G. DED 1 Learning G. DO J. Learning G. 20 7 Learning G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 7 Learning G. 20 Learning G. 20 G. D Learning G. DE LEAVING G. 20 G. 20 G. 20

Remarks



(e)	Patients can make appointments using the health centre's website.	Examin Marks	er Only Remark
	Explain how a web page can be created using HTML.		
	[4]		
		Total Qu	estion 4
		[Tur	n over
8452			



5	An organisation requires new software.	Examiner Only Marks Remark
	(a) Identify four benefits of choosing off-the-shelf software.	
	1	
	2	
	3	
	4	
	4	
	[4]	
	The organisation decides on a custom built system.	
	(b) Identify two factors which should be taken into account when deciding	
	the feasibility of the proposed system.	
	1	
	2	
	[2]	
8452		

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning C. 20 7 Learning G. DED 1 Learning G. Rewards T Learning G. 20 G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 1 Learning G. 20 Learning G. 20 G. D Learning G. DE LEAVING G. 20 G. 20 G. 20

Remarks



	(c)	Describe the activities which take place during the design stage.	Examin Marks	er Only Remark
			_	
			_	
			_	
			_	
			_	
			_	
		[4	·]	
			[Tur	n over
84	52			



(d)	Documentation will be produced for the new system.	Examin Marks	er Only Remark
	Describe each of the following:		
	Technical documentation		
	User documentation		
	[6]		
8452			

Revertin 200 G. 20 7 Learning G. 20 ; Learning G. 20 G. De learning G: DE LEGATIONS G. DED 1 Learning G. DO J. Learning G. 20 G. 20 7 Learning G. 20 Loaming G. 20 Learning G. 20 7 Learning G. 20 Learning G. 20 G. D Learning G. D 7 Learning G. 20 G. 20 G. 20

Remarks



(e)	The new system will undergo testing.		Examin Marks	er Only Remark
	Explain what is meant by each of the following:			
	Application testing			
	A			
	Acceptance testing			
		[6]		
	THIS IS THE END OF THE QUESTION PAPER		Total Qu	uestion 5
		•		
			Quality o	of written nication



DO NOT WRITE ON THIS PAGE

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

D 1 Loaning

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.

114602

