Surname	Centre Number	Candidate Number
Other Names		2



GCE AS/A level

1241/01



INFORMATION AND COMMUNICATION TECHNOLOGY – IT1 Information Systems

A.M. MONDAY, 1 June 2015

2 hours 15 minutes

For Exa	For Examiner's use only						
Question	Maximum Mark	Mark Awarded					
1.	6						
2.	8						
3.	4						
4.	6						
5.	8						
6.	2						
7.	8						
8.	18						
9.	4						
10.	16						
Total	80						

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer all questions.

Answers should be written in the spaces provided.

Where the space is not sufficient for your answer use a continuation sheet, taking care to number the continuation correctly.

The intended marks for questions or part questions are given in brackets []. You are advised to divide your time accordingly. The total number of marks available is 80.

You are reminded of the necessity for good written communication and orderly presentation in your answers.

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Quality of written communication will be assessed in question 8(b).

Make sure you hand in your spreadsheet with this booklet at the end of the examination.

SECTION A

Answer all questions.

1.	The perso	purpose of a good <i>Human Computer Interface (HCI)</i> is to make it as easy as possible for on to use a computer system. The use often decides which HCI is the most suitable.	or a
	Desc	cribe an actual use and an appropriate advantage for each of the following HCI.	
	(a)	Command line	[2]
	•••••		·····•
	•••••		·····•
	•••••		
	•••••		······•
	(b)	Speech recognition system	[2]
			·····•
	•••••		·····•
			·····
	(c)	Game playing device	[2]
	•••••		
	•••••		•••••
	•••••		•••••
	•••••		



2.

different example.

Good quality information is needed to make informed decisions. Other than *accurate* or *complete*, describe **two** other *different* characteristics of good quality information. Illustrate **each** characteristic you have described with an appropriate and *distinctly*

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(b)	Cood quality information is vital to the auguston of an organization and halps them in the
(b)	Good quality information is vital to the success of an organisation and helps them in the decision making process. Other than <i>monitoring progress</i> , and using examples, explain two ways in which good quality information can add value to an organisation. $[2\times2]$
	two ways in which good quality information can add value to an organisation. [2×2]
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3.	A family is considering linking up its stand-alone computers to form a <i>Local Area Network</i> (LAN).	Offig
	Describe the <i>advantages</i> and <i>disadvantages</i> for the family of using a home network of this type. [4]	



4.	Modern hospitals rely on databases as part of their administration systems. Define for a novice user what is meant by each of the functions below: • Query • Report • Import/Export	
	and for each function give an appropriate use in hospital administration/record keeping. [3×2]	

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case, four o	n business wof data and sother advanta	ges of ICT	over manu	ions, descr al methods	of data pro	uitable exan cessing.	nples in e [4
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6.	Other than the <i>data itself</i> and <i>hardware</i> , describe two factors that could have an impact on the efficiency of a data processing system.	Examiner only [2]



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8	Expert systems are used to help diagnose patients' illnesses. Describe the three mecomponents of an expert system and give three benefits and two drawbacks of using an expert system for patient diagnosis.
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••	



(a)	(i)	The branches make use of barcodes for entering product data. Describe in what a barcode is and state three items that are contained in a barcode.
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	(ii)	State a benefit and a drawback of using barcodes for entering product data.
	(ii)	State a benefit and a drawback of using barcodes for entering product data.
	(ii)	State a benefit and a drawback of using barcodes for entering product data.
	(ii)	State a benefit and a drawback of using barcodes for entering product data.
	(ii)	State a benefit and a drawback of using barcodes for entering product data.
	(ii)	State a benefit and a drawback of using barcodes for entering product data.
	(ii)	State a benefit and a drawback of using barcodes for entering product data.
		State a benefit and a drawback of using barcodes for entering product data.

(b)	The electronic goods company uses automatic 'Just in time' control systems for their stoc control. Describe what happens in a 'Just in time' stock control system after a product' barcode is scanned, giving three benefits and three drawbacks of this system for the company.
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(c)	(i)	State what is meant by the term <i>EFTPOS</i> . [1]	onl
••••			
	(ii)	Give an <i>advantage</i> to the company and an <i>advantage</i> to the customer of using EFTPOS. [2]	
•••••			

Examiner only

18

SECTION B

Answer all questions.

9.	Spreadsheets can be used for many purposes and tasks. Describe how a company can use a spreadsheet for two <i>different</i> tasks and for each of the tasks you have described, give a <i>different</i> benefit of using a spreadsheet to complete each task. [4]



YOU MUST REFER TO YOUR OWN SPREADSHEET TO ANSWER THE FOLLOWING QUESTION.

IF NO SPREADSHEET EVIDENCE IS SUBMITTED THEN NO MARKS CAN BE AWARDED.

MAKE SURE THAT YOU SHOW IN YOUR ANSWER WHERE THE PROCESSES, FUNCTIONS/FORMULAS CAN BE FOUND IN YOUR SPREADSHEET. FOR EXAMPLE PAGE 6 CELL D4.

10.	(a)	Describe in detail the purpose of two functions from list A and one function from list which you have used in your spreadsheet.	t B, [6]
		A: SUM, COUNT, MAX, MIN, AVERAGE, RAND B: Single IF, Multiple IF, DATE, ROUND	
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(b)	Describe one macro you used in your spreadsheet, stating why you used it. [2	Examiner only
(c)	Describe two methods of <i>simplifying data entry</i> you used in your spreadsheet. [2×2	
• • • • • • • • • • • • • • • • • • • •		.

(d)	Describe, giving the purpose, two different functions or processes you used in your spreadsheet. [2×2]	0111
	In your answer do not describe any formula, function or process listed in $10(a)$ or mentioned in your answers to $10(b)$ or $10(c)$.	
•••••		
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ENSURE YOU ATTACH THE PRINTOUTS OF YOUR SPREADSHEET TO YOUR EXAMINATION ANSWER PAPER.

END OF PAPER