

## **Cambridge International Examinations**

Cambridge International Advanced Subsidiary and Advanced Level

CANDIDATE NAME								
CENTRE NUMBER					CANDI NUMBI			

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### APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/13

Paper 1

May/June 2014

1 hour 15 minutes

Candidates answer on the Question Paper.

No additional materials are required.

### **READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

Do not use staples, paper clips, glue or correction fluid.

You may use an HB pencil for any diagrams, graphs or rough working.

DO NOT WRITE IN ANY BARCODES.

Answer all questions.

The number of marks is given in brackets [] at the end of each question or part question.

The businesses described in this paper are entirely fictitious.



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## Scenario 1 Questions 1 and 2

The WIMBA car company is planning to introduce a new family car and wishes to advertise it. It has decided to create its own website rather than advertising using pop-ups on someone else's website.

The company expects the website developers to work from home. This will enable the company to save the cost of providing offices and paying running costs such as heating and electricity bills.

1

(a)	There are <b>three</b> types of advertising: business, product and service advertising.
	Name and describe the type of advertising that is used to promote the sales of a family car.
	Name
	Description
	[3]
(b)	Text is created using word processing software and imported into the website. This text could be in the form of a description of the company.
	Describe information (naming the type of software), which would be prepared using <b>four</b> other different software packages before inclusion in the website.
	1
	2
	3
	4
	[4]

(c)	Describe <b>three</b> drawbacks to the company of using pop-ups.
	1
	2
	3
	[3
(d)	Describe <b>three</b> reasons why the company would use pop-unders rather than pop-ups.
	1
	2
	3
	[3

(e)	Apart from the drawbacks of using pop-ups, give <b>four</b> disadvantages to the company advertising on someone else's website compared to creating their own website.	of
	1	
	0	
	2	
	3	
	4	
		[4]

2	(a)	Describe <b>four</b> benefits of working at home rather than working in an office from the point of view of the employees.
		1
		2
		3
		4
		[4]
	(b)	Apart from the running costs of the offices, describe <b>three</b> other ways that the company will save money by having the employees working at home rather than working in the office.
		1
		2
		3
		[3]

# Scenario 2 Questions 3, 4 and 5

The Queen Elizabeth Hospital uses computers to:

- help run its intensive care unit
- store patients' records.

The hospital employs a number of office staff to deal with the storage of patient records. The staff all have a duty of confidence.

The computers are not used to store details of medicines. When the nurses realise there is a shortage of medicines they have to fax their official orders for new stock to the hospital pharmacy.

3	(a)	Describe how computers are used to monitor the medical condition of patients in intensional care.	ve
			•••
			[5]
	(b)	Describe <b>four</b> benefits of using computers for monitoring the patients.	
	( )	1	
		2	
		3	
		4	
		4	
			[4]

4	Using this scenario, explain what is meant by a 'duty of confidence' with regard to pa information.	ıtient
5	Describe the features of a fax machine which allow the orders of new stock to be placed by nurse.	/ the
		[3]

### Scenario 3 Questions 6 and 7

Mikado's is a chain of fast food restaurants. Each member of the sales staff is paid weekly depending on how much time they have worked.

The payroll is a computerised system which also produces financial reports and exception reports.

Mikado's is going to introduce a self-ordering system at all its restaurants so fewer sales staff will be required. The working patterns of the remaining sales staff will be affected.

6	(a)	Give <b>three</b> items of information, related to their pay, that will need to be stored on the master file about each member of the sales staff.
		1
		2
		3
		[3]
	(b)	Give <b>two</b> items of information that will need to be stored about each member of the sales staff on the transaction file in order that their wages can be calculated.
		1
		2
		[2]
	(c)	The processing of the payroll is an example of batch processing.
		Explain what is meant by batch processing.
		[3]

(d)	Give <b>two</b> advantages of batch processing compared with online processing.
	1
	1
	2
	[2]
(e)	Using examples of data from the master and transaction files, describe the computer processing used in the production of payments to the sales staff.
	[5]
(f)	Describe the features of financial reports and exception reports that might be produced by the sales staff payroll system.
	[3]

7	Name and describe <b>three</b> ways in which the staff working patterns, other than unemployr could change.	nent,
	1	
	2	
	3	
		[6]

# Scenario 4 Questions 8 and 9

Grafton mail order catalogue company currently operates by receiving orders from its customers by phone. They are going to extend the way they receive orders by having an online system.

Each customer has a customer ID. This consists of ten digits.

Grafton has employed Oscar, a systems analyst, to oversee the introduction of the new system. To begin with he will analyse the existing system.

After designing and developing the system Oscar will need to test it.

8

(a)	Give <b>three</b> advantages to Grafton of introducing online shopping.
	1
	2
	3
	[3]
(b)	Give <b>three</b> disadvantages to customers of online shopping.
	1
	2
	2
	3
	[3]

9

(a)	After organising the results of his research, Oscar will need to complete the analysis of the existing system.
	Identify three stages he will need to complete to do this.
	1
	2
	3
	[3]
(b)	Before it is completed the system will need to be tested.
	Describe <b>three</b> validation rules that could be used on the customer ID and for each one, give an example of data that could be used to test whether it works or not.
	Rule 1
	Rule 2
	Rule 3
	[6]

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