Centre Number

wjec

Other Names

# 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.

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.

# Examiner only **SECTION A** Answer all questions. The purpose of a good *Human Computer Interface (HCI)* is to make it as easy as possible for a person to use a computer system. The use often decides which HCI is the most suitable. 1. Describe an actual use and an appropriate advantage for each of the following HCI. Command line [2] (a) ..... Speech recognition system [2] (b) Game playing device (C) [2] ..... 6

2.

8

Examiner only

only A family is considering linking up its stand-alone computers to form a Local Area Network 3. (LAN). Describe the advantages and disadvantages for the family of using a home network of this type. . [4] .....

### Examiner

Examiner only

> 1241 010005

4.	<ul> <li>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:</li> <li>Query</li> <li>Report</li> <li>Import/Export</li> </ul>	or
	and for <b>each</b> function give an appropriate use in hospital administration/record keeping. [3×2]	
		6
		6

Turn over.

© WJEC CBAC Ltd.

only The modern business world could no longer exist without ICT systems. Other than *faster* processing of data and speed of communications, describe using suitable examples in each case, **four** other advantages of ICT over manual methods of data processing.  $[4\times2]$ 5. .....

Examiner

6. Other than the *data itself* and *hardware*, describe **two** factors that could have an impact on the efficiency of a data processing system. [2]

1241 010007

(1241-01-R1)

Expert systems are used to help diagnose patients' illnesses. Describe the **three** main components of an expert system and give **three** benefits and **two** drawbacks of using an expert system for patient diagnosis. [8] 7. \_\_\_\_\_ ..... ..... ..... .....

Examiner A multinational electronic goods company uses automatic stock control and allows its customers 8. to pay in a variety of ways. The branches make use of barcodes for entering product data. Describe in detail what a barcode is and state **three** items that are contained in a barcode. [3] (a) (i) [3] ..... ..... State a benefit and a drawback of using barcodes for entering product data. [2] (ii) .....

only

(b)	The electronic goods company uses automatic 'Just in time' control systems for their stock control. Describe what happens in a 'Just in time' stock control system after a product's barcode is scanned, giving <b>three</b> benefits and <b>three</b> drawbacks of this system for the company. [10]	Examiner only

(c)	(i)	State what is meant by the term <i>EFTPOS</i> . [1]	Examiner only
	(ii)	Give an <i>advantage</i> to the company and an <i>advantage</i> to the customer of using EFTPOS.	]

11

Turn over.

# 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 different tasks and for each of the tasks you have described, give a different benefit of using a spreadsheet to complete each task. [4]

			E)
		YOU MUST REFER TO YOUR OWN SPREADSHEET TO ANSWER THE FOLLOWING QUESTION.	
		IF NO SPREADSHEET EVIDENCE IS SUBMITTED THEN NO MARKS CAN BE AWARDED.	
	М	AKE SURE THAT YOU SHOW IN YOUR ANSWER WHERE THE PROCESSES, FUNCTIONS/FORMULAS CAN BE FOUND IN YOUR SPREADSHEET. FOR EXAMPLE PAGE 6 CELL D4.	
0.	(a)	Describe in detail the purpose of <b>two</b> functions from list A and <b>one</b> function from list B, which you have used in your spreadsheet. [6]	
		A: SUM, COUNT, MAX, MIN, AVERAGE, RAND B: Single IF, Multiple IF, DATE, ROUND	
	•••••		

Examiner

Examiner only Describe one macro you used in your spreadsheet, stating why you used it. (b) [2] \_\_\_\_\_ ..... Describe two methods of simplifying data entry you used in your spreadsheet. (C) [2×2] ..... ..... .....

|Examiner only Describe, giving the purpose, two different functions or processes you used in your (d) spreadsheet. [2×2] 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). ..... 16 ENSURE YOU ATTACH THE PRINTOUTS OF YOUR SPREADSHEET TO YOUR EXAMINATION ANSWER PAPER. **END OF PAPER**