IT (J836)

R050/01, IT in the Digital World (Level 1/2), Specimen

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Please note that you may see slight differences between this paper and the original.

Candidates answer on the Question paper.

OCR supplied materials:
Additional resources may be supplied with this paper.

Other materials required:
• Pencil
• Ruler (cm/mm)

Duration: 90 mins

INSTRUCTIONS TO CANDIDATES

• Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
• Use black ink. HB pencil may be used for graphs and diagrams only.
• Answer **all** the questions, unless your teacher tells you otherwise.
• Read each question carefully. Make sure you know what you have to do before starting your answer.
• Where space is provided below the question, please write your answer there.
• You may use additional paper, or a specific Answer sheet if one is provided, but you must clearly show your candidate number, centre number and question number(s).

INFORMATION FOR CANDIDATES

• The quality of written communication is assessed in questions marked with either a pencil or an asterisk. In History and Geography a *Quality of extended response* question is marked with an asterisk, while a pencil is used for questions in which *Spelling, punctuation and grammar and the use of specialist terminology* is assessed.
• The number of marks is given in brackets **[ ]** at the end of each question or part question.
• The total number of marks for this paper is **70**.
• The total number of marks may take into account some 'either/or' question choices.

1   A connecting line is a component of a flowchart.

Identify **two other** components of a flowchart.

1 _____

2 _____

[2]

2   Identify **one** display hardware consideration for a Human Computer Interface (HCI).

_____ [1]

3   Which of these is formatted as an **alphanumeric** data type?
(Tick (✓) the correct box)

A   14/04/2021   ☐

B   £10.99   ☐

C   432BJ   ☐

D   Y / N   ☐

[1]

4   Which of these is **not** a secondary research source?
    (Tick (✓) the correct box)

    A   Book   ☐

    B   Interview   ☐

    C   Magazine   ☐

    D   Website   ☐

                                                                        [1]

5   Identify **one** logical storage location.

    _____ [1]

6   Which type of test checks that a system will work on a device screen?

    _____ [1]

7   Which of these hackers has permission to hack into a business computer system?
    (Tick (✓) the correct box)

    A   Black Hat   ☐

    B   Grey Hat   ☐

    C   White Hat   ☐

                                                                        [1]

8   Draw a line to link the type of social engineering to the correct description.

You will only use two types of social engineering to complete the task.

Type of social engineering	Description
Baiting	Criminals promise goods to get the information they need
Phishing	Criminals use computer programs designed to trick a user into buying and downloading unnecessary and dangerous software
Scareware	

[2]

9   Hackers have accessed a business database. Some of the stored data has been deleted.

This is an example of? *(Tick (✓) the correct box)*

A   Data destruction   ☐

B   Data manipulation   ☐

C   Data modification   ☐

D   Data theft   ☐

[1]

10   Keypads are one physical protection measure.

Identify **one other** physical protection measure.

_____ [1]

11   Which legislation applies to employees using a computer system?

     (Tick (✓) the correct box)

     A   Copyright, Designs and Patents Act

     B   Data Protection Act

     C   Freedom of Information Act

     D   Health and Safety at Work Act

                                                                                          [1]

12   Identify **one** type of distribution channel connectivity that could be used for digital communications.

                                                                                          [1]

13   Complete the sentence.

     When talking about the Internet of Everything (IoE), WWW stands for

                                                                                          [1]

14(a) Monty Bella restaurant has a takeaway service. All meals on the menu can be ordered by customers to takeaway. Customers telephone the restaurant to order their meals. The total cost of the order is calculated by the restaurant. Customers pay for the order using a debit card.

When they order, customers are given an order number and a time when the order will be ready for collection.

The orders are handwritten by the restaurant staff.
An example of an order is shown in **Fig 1**.

Name	Mia Taylor
Email address	MT901@reur.co.uk
Meals	Beef pie with chips Lasagna Salad
Cost	£18.70
Paid	Y
Order number	2378
Collection time	19:15

Fig.1

Complete the table to show the data types that are used when entering the order onto a computer system. Justify your choice.

	Data Type	Justification
Name		
Cost		
Paid		

[9]

(b)

(i) Describe **one** characteristic of an external solid-state drive that would make it suitable for Monty Bella to store the customer orders.

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[2]

(ii) Identify **one** logical storage location that could be used to store the customer orders.

----

[1]

15(a) Monty Bella restaurant has a takeaway service. All meals on the menu can be ordered by customers to takeaway. Customers telephone the restaurant to order their meals. The total cost of the order is calculated by the restaurant. Customers pay for the order using a debit card.

When they order, customers are given an order number and a time when the order will be ready for collection.

There have been occasions where customer orders have been mixed up.

Monty Bella is thinking about creating a website where customers can order takeaway meals and pay online.

A Human Computer Interface (HCI) will be created as part of the website.

(i) Explain the purpose of a Human Computer Interface (HCI).

----

[2]

(ii) Customers of Monty Bella could use the HCI using the keyboard interaction method.

Explain **one** advantage and **one** disadvantage to the **customers** of using a keyboard to interact with the HCI.

Advantage _____

_____

_____

_____

_____

Disadvantage _____

_____

_____

_____

_____

[4]

(iii) Identify **one** other interaction method that could be used with the HCI

_____**[1]**

(b) A validation tool that limits the user choice could be applied to the quantity of each meal that customers can order through the Monty Bella website.

Explain why a limited choice validation tool will reduce errors when customers are ordering meals.

_____

_____

_____

_____ [2]

(c) Create a mind map to plan the content for the homepage of Monty Bella's new takeaway website.

Marks will be rewarded for:

- Content
- Layout

[8]

16(a) A restaurant website has been created.

User testing has been carried out.
Explain why user testing should be carried out on the website.

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[2]

(b) A leaflet has been created to advertise the takeaway service of Monty Bella restaurant. The leaflet will be distributed by email to existing customers.

Explain **one** advantage to the Monty Bella **restaurant** of using a leaflet to advertise the takeaway service.

---

[2]

(c) Explain **one** disadvantage to the **customers** of distributing the leaflet by email.

---

[2]

17(a) Customers have to register to use a takeaway website. To register, customers need to input their details including name, address, a phone number and payment details.

The customer details are stored by the restaurant.

Identify the legislation that relates to the storing of customer details.

_____ [1]

(b) Identify **two** actions that need to be taken by the restaurant to comply with the legislation.

1 _____

_____

2 _____

_____

[2]

(c) Monty Bella restaurant is concerned about the security of the website.

When a customer registers for the website, the customer must create a username and password.

Explain how the usernames and passwords will increase the security of the website.

_____

_____

_____

_____

_____

[2]

(d) Monty Bella restaurant is concerned about the security of the website. The restaurant has been advised to install a firewall.

Explain how a firewall will increase the security of the Monty Bella website.

_____

_____

_____

[2]
_____

18 Monty Bella restaurant wants to collect feedback from its customers about the takeaway service.

An online survey will be used to collect the feedback from the customers.

Explain **one** advantage and one disadvantage to the **restaurant** of using an online survey to collect the data.

Advantage _____

_____

_____

_____

Disadvantage _____

_____

_____

_____

[4]

19   Monty Bella restaurant uses a smart device connected to the Internet of Everything (IoE).

Discuss the advantages and disadvantages to the **restaurant** of using a smart device connected to the Internet of Everything.

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[9]

END OF QUESTION PAPER