



Adabistan-e-Soophia

General Certificate of Education Ordinary Level 3 (Test 2)

Adabistan-e-Soophia
School for Boys & Girls

CANDIDATE
NAME

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CENTER NUMBER							CANDIDATE NUMBER							
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Computer

2210/01

Session

2	0	2	0	-	2	1
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Time

2	h	r	1	5	m	i	n	u	t	e	s
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Marks

4	0
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Additional Materials: *Answer Booklet/Paper*

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet. Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams or rough working.

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

Answer all questions.

At the end of the examination, fasten all your work securely together.

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

1. Blair writes a paragraph about data transmission in her Computer Science examination.

Use the list given to complete Blair's paragraph by inserting the correct **five** missing terms. Not all terms will be used. Terms can be used more than once.

- duplex
- half-duplex
- parallel
- serial
- simplex

..... data transmission is when data is transmitted a single bit at a time. data transmission is when multiple bits of data are sent all at once. If a user wants to transmit data over a long distance, with the highest chance of accuracy, data transmission should be used. If data needs to be transmitted in one direction only, for example from a computer to a printer, data transmission should be used. If a user has a large amount of data to transmit and this needs to be done as quickly as possible data transmission should be used.

[5]

2. The contents of three binary registers have been transmitted from one computer to another. **Odd parity** has been used as an error detection method.

The outcome after transmission is:

- **Register A** and **Register B** have been transmitted **correctly**.
- **Register C** has been transmitted **incorrectly**.

Write the appropriate **Parity bit** for each register to show the given outcome.

	Parity bit							
Register A		0	1	0	0	0	1	1
Register B		0	0	0	0	1	1	1
Register C		0	0	0	0	0	1	1

[3]

3. A company discovers malware on its network.

Explain **two** ways that the malware could have been introduced to the company's network.

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..... [4]

4. Gerald uses a keyboard to enter a website address into the address bar of his browser.

(a) Describe how Gerald's key presses on his keyboard are processed by the computer.

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.....
..... [4]

(b) State **three** functions of a browser.

1
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2
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3
..... [3]

(c) The website Gerald visits uses https.

Explain what is meant by https.

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..... [3]

(d) MIDI uses serial data transmission.

Explain **two** advantages of using serial transmission rather than parallel transmission.

Advantage 1

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Advantage 2

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[4]

5. Maisey purchases a new router and attaches it to her computer. The connection she sets up uses duplex data transmission.

(a) Five statements are given about duplex data transmission.

Tick (✓) to show if the statement is **True** or **False**.

Statement	True (✓)	False (✓)
Duplex data transmission can be either serial or parallel		
Duplex data transmission is when data is transmitted both ways, but only one way at a time		
Duplex data transmission is always used to connect a device to a computer		
Duplex data transmission is when data is transmitted both ways at the same time		
Duplex data transmission automatically detects any errors in data		

[5]

(b) Maisey's computer uses an integrated circuit (IC) for data transmission that sends multiple bits at the same time.

State whether the IC uses **serial** or **parallel** data transmission.

..... [1]

(c) Maisey purchases a new printer and connects it to her computer using the USB port.

Explain **two** benefits of using a USB connection.

Benefit 1

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Benefit 2

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[4]

6. RockICT is a music business that has a website to allow customers to view and buy the products it sells.

The website consists of web pages.

- (a) Describe what is meant by HTML structure and presentation for a web page.

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.....[4]