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Entry Test

Academic Session 2025-26

COMPUTER

Total Marks **40**

45 minutes

Class: IGCSE level II (IX)

Fill in these boxes and read what is printed below:

Candidate Name

Date

Read Carefully

1 **Write your answers in black ink in the space provided.**

2 **Before leaving the examination room, you must give this paper to the invigilator, if you do not, you may lose all the marks for this paper.**

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Total Marks		**Marks Obtained**		**Percentage**	

Q # 1: A new computer comes with primary and secondary storage.

(a) Data storage is measured using binary denominations.

Complete each conversion.

8 bytes = ... nibbles

512 kibibytes (KiB) = ... mebibytes (MiB)

4 gibibytes (GiB) = ... mebibytes (MiB)

1 exbibyte (EiB) = ... pebibytes (PiB)

[4]

Working space

.....

.....

.....

.....

(b) Random access memory (RAM) is an example of primary storage.

Give **three** examples of data that is commonly stored in RAM.

1 .....

2 .....

3 .....

[3]

(c) Describe the purpose of secondary storage.

.....

.....

.....

..... [2]

Q # 2: A wildlife photographer stores their digital images on a computer.

(a) Complete the table by defining each term about images.

Image term	Definition
pixel	....
resolution	....

[2]

(b) One of the images has a resolution of 1000 × 1000 and a colour depth of 2 bytes.

Calculate the file size of the image. Give your answer in bytes.

Show your working.

Working space .....

.....

.....

.....

File size ..... bytes

[2]

(c) The photographer decides to purchase a solid-state storage device to back up their images.

Complete the description of solid-state storage.

Use the terms from the list.

Some of the terms in the list will **not** be used. You should only use a term once.

binary denary electrons grid neutrons

non-volatile RAM star transistors virtual volatile

Solid-state storage is ..... . This means that the data is **not** lost when the power is turned off.

Solid-state storage is made of ..... that are laid out in a ..... .

Gates are used to control the flow of the ..... through the transistors. This changes the data in the transistors from 1 to 0, or from 0 to 1.

[4]

(d) The photographer compresses an image file before it is emailed.

Give **one** reason why a file is compressed.

.....

..... [1]

Q # 3: A farm has an automated drinking system for its animals. The drinking system has a water bowl that contains the water. When the water bowl is empty, it is automatically refilled.

The system uses a sensor and a microprocessor.

(a) Identify the most appropriate sensor for this system.

..... [1]

(b) Describe how the sensor and the microprocessor are used to automatically refill the water bowl.

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..... [6]

Q # 4: A user wants to connect their computer to a network.

(a) (i) Identify the component in the computer that is needed to access a network.

..... [1]

(ii) Identify the type of address that is allocated to the component by the manufacturer, which is used to uniquely identify the device.

..... [1]

(b) A dynamic internet protocol (IP) address is allocated to the computer when it is connected to the network.

(i) Identify the device on the network that can connect multiple devices and automatically assign them an IP address.

..... [1]

(ii) Describe what is meant by a dynamic IP address.

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..... [3]

Q # 5: (a) The student uses a web browser to access data on the internet.

Explain the purpose of the web browser.

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..... [2]

(b) Storing cookies is one function of the web browser.

Give **three** other functions of the web browser.

1 .....

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2 .....

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3 .....

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[3]

(c) A student visits a website that uses session cookies, instead of persistent cookies.

Explain the difference between session cookies and persistent cookies.

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..... [4]