

1 Complete the following sentences, using the most appropriate items from the list below.

- A 3D printer An ADC A compiler An interpreter A microphone
 A monitor A numeric keypad A speaker A switch A USB

- (a) is a device used to input a PIN. [1]
 (b) analyses and executes a program line by line. [1]
 (c)produces output in the form of solid objects. [1]
 (d)produces output in the form of sound. [1]

2 Tick whether the following are examples of **Magnetic tape**, **Blu-ray** or **DVD RAM**.

	Magnetic tape (✓)	Blu-ray (✓)	DVD RAM (✓)
Does not require a laser to read the data.			
Uses serial access only.			
Used to store and play HD movies.			
Can store and read data at the same time.			

[4]

3 A media company with branches around the world has recently opened a new branch in London. The branch includes a number of different computer networks. Identify the most appropriate type of network to answer each of the questions.

- (a) The type of network used to connect the branch to its head office in New York is called a [1]
 (b) The type of cabled network used to connect computers together in one of the offices is called a [1]

4 Circle the names of **three** devices which are used for input.

- CD writer Laser printer Pen drive Mouse
 Speaker Touch screen Remote control Wide format printer

[3]

5 A geyser is a hot spring in which water occasionally boils, sending a tall column of water and steam into the air. A temperature sensor is used to monitor the temperature near the geyser. The data from the sensor is sent to a microprocessor.

(a) Explain why the data from the sensor has to be changed before it is read by the microprocessor.

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[3]

(b) Describe **five** advantages of using sensors and microprocessors to monitor the temperature in geysers rather than using manual methods.

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[5]

6 Tick whether the following refer to **moderated** or **un-moderated** forums

	moderated (✓)	un-moderated (✓)
All posts are held in a queue.		
Posts are not policed.		
This forum reduces the chance of offensive messages.		
This forum stops several postings of the same topic.		

[2]

-----END OF PAPER-----

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 1 Theory

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- 1 For each of the different statements, tick the most appropriate network.

	WAN (✓)	WLAN (✓)	LAN (✓)
A cabled network used in one building.			
The internet is an example of this type of network.			
Several networks connected together using a router.			
This network is connected without cables.			

[4]

- 2 Tick whether the following are examples of **System Software** or **Applications Software**.

	System Software (✓)	Applications Software (✓)
Compiler		
Word processing software		
Spreadsheet software		
Operating system		

[2]

- 3 Command Line Interface (CLI) and Graphical User Interface (GUI) are examples of interfaces found in computer systems.

Give **two** advantages of a computer having a GUI rather than a CLI.

1.....

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2.....

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[2]

4 A router is used in networks.

Describe how a router routes data packets.

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.....
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.....
..... [3]

5 An office worker is about to open an attachment but is worried it might contain a computer virus.

Explain what is meant by a computer virus.

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..... [2]

6 Circle **three** items which are used as output devices.

- | | | | |
|---------|-------------------|-------------|-------------|
| Buzzer | CD/RW drive | Keyboard | LCD monitor |
| Speaker | Solid state drive | Trackerball | Web cam |

[3]

-----END OF PAPER-----

- 1 There are many types of printer. Name the printer which best fits the descriptions given below.
- (a) A printer that prints by pressing metal pins against an ink ribbon onto the paper
.....[1]
 - (b) A printer that sprays tiny droplets of ink directly onto the paper
.....[1]
 - (c) A printer that uses toner to transfer the print image to plain paper
.....[1]
 - (d) A printer that uses resin to create solid objects
.....[1]

- 2 Complete each sentence below using the most appropriate item from the list.
- a bridge a hub a keyboard a microphone a mouse**
a printer a router a scanner a sensor a switch
- (a) A network device which broadcasts data passing through it is called
.....[1]
 - (b) A network device that connects a LAN with the internet is called
.....[1]
 - (c) A network device that connects a LAN to another LAN using the same protocol is called
.....[1]
 - (d) A network device that learns which devices are connected to which ports is called
.....[1]

3 Tick whether the following statements are **true** or **false**.

	true (✓)	false (✓)
Answers to multiple choice examination papers can be read using an Optical Mark Reader.		
MICR reads the information on a credit card.		
The chip on a credit card is read by a PIN reader.		
An RFID chip can be used to track stock.		

[2]

4 Tick whether the following activities are part of the **Design** or the **Implementation** or the **Evaluation** of a system.

	Design (✓)	Implementation (✓)	Evaluation (✓)
Comparing the outcomes with the original task requirements			
Changing over to the new system			
Identifying any limitations and necessary improvements to the system			
Selecting validation routines			

[4]

5 Laptop computers are often equipped with Solid State Drives (SSD) or Hard Disk Drives (HDD).

(a) Give **four** advantages of SSD compared to HDD.

- 1
- 2
- 3
- 4

[4]

(b) People now tend to buy laptops rather than desktop computers. Despite this, desktop computers are still fairly popular.

Describe **three** advantages of using a desktop computer rather than a laptop computer.

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[3]

6 Describe the differences between the internet and an intranet.

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[4]

-----END OF PAPER-----