



Subject: Computing

Levels: 5-6-7-8

Time: 2 hours

Name \_\_\_\_\_

Class \_\_\_\_\_

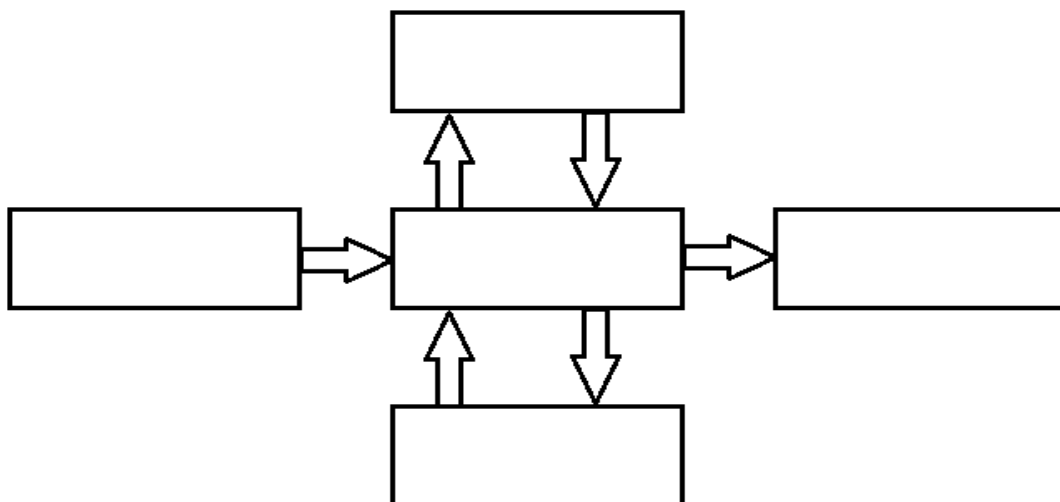
## Section 1: The Computer System

1. **FILL in** the blanks below to explain **what a computer system is**. [4]

A computer is a machine that accepts \_\_\_\_\_,  
\_\_\_\_\_ it and then outputs \_\_\_\_\_.

It also \_\_\_\_\_ data for later use or for use by the CPU.

2. **FILL in** the following diagram. [5]



3. **FILL in** the text below using the words provided.

[5]

<i>needed</i>	<i>hard disk</i>	<i>keyboard</i>	<i>software</i>
<i>processing</i>	<i>hardware</i>	<i>see</i>	<i>raw</i>
<i>touch</i>	<i>programs</i>		

The computer system is made up of \_\_\_\_\_ and \_\_\_\_\_ . Both of these are \_\_\_\_\_ for a computer to work. Hardware is all the things that you can \_\_\_\_\_ and \_\_\_\_\_ , such as the monitor, \_\_\_\_\_ , CPU, \_\_\_\_\_ , and so on.

Software is the \_\_\_\_\_ that tell the computer what to do.

Data is input into the computer by the user. This is the \_\_\_\_\_ information that has not been processed yet.

Anything that is stored in the computer is called data. Information is the result of the \_\_\_\_\_ of data and is output to the user. Therefore, it must be in a format that the user understands.

4. Name THREE different **types** of computers.

[3]

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

5. WHICH is the most **powerful** computer and who **uses** it? [2]

Most powerful computer: \_\_\_\_\_

Used by: \_\_\_\_\_

6. Name ONE **advantage** and ONE **disadvantage** of a tablet over a laptop. [2]

Advantage: \_\_\_\_\_

Disadvantage: \_\_\_\_\_

7. WHICH are the FOUR main **components** of a computer system? [4]

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

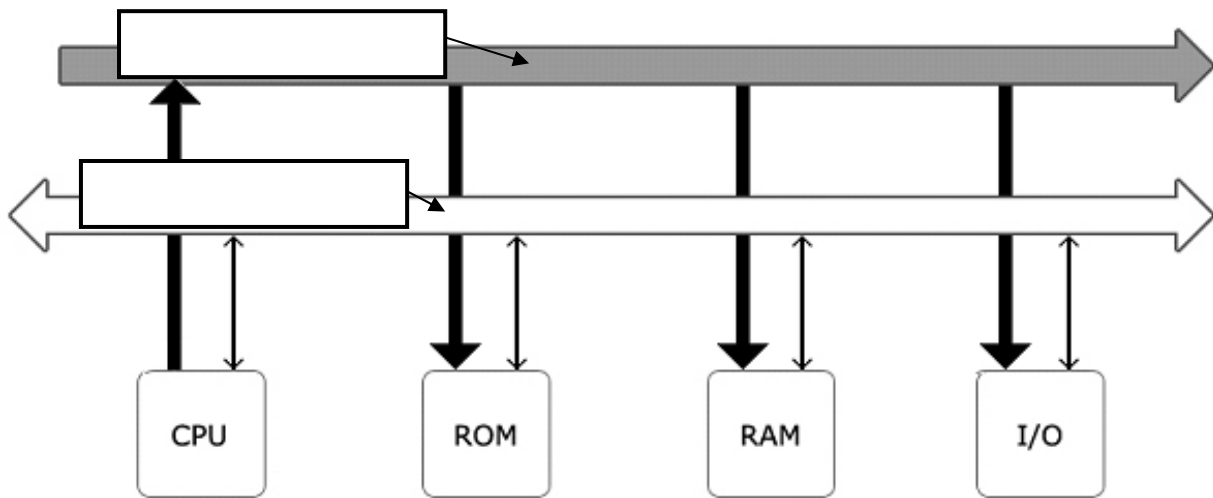
8. MATCH the following **buses** with their **definitions**. [2]

1	Data bus
2	Address bus
3	System bus
4	Control bus

	Reports the status of components
	Sends and receives data
	Sends and receives addresses
	Is the main path between components

9. LABEL this diagram of the system bus with the TWO appropriate buses.

[2]



10. MARK the following devices as INPUT, OUTPUT or STORAGE.

[7½]

- |                      |                 |                  |                     |                   |
|----------------------|-----------------|------------------|---------------------|-------------------|
| <i>Dot-matrix</i>    | <i>Keyboard</i> | <i>Pen-drive</i> | <i>Memory card</i>  | <i>Microphone</i> |
| <i>Laser printer</i> | <i>Plotter</i>  | <i>Monitor</i>   | <i>Hard disk</i>    | <i>Scanner</i>    |
| <i>Robot</i>         | <i>CD</i>       | <i>Trackball</i> | <i>Blu-ray disc</i> | <i>Touchpad</i>   |

INPUT	OUTPUT	STORAGE

11. FILL in the following about **ONE input** device of your **choice**. [5]

Input device: \_\_\_\_\_

Use: \_\_\_\_\_

Advantage 1: \_\_\_\_\_

Advantage 2: \_\_\_\_\_

Disadvantage: \_\_\_\_\_

12. MATCH the following **input devices** with their **use**. [2½]

1	Magnetic stripe reader		read cheques
2	MICR		edit scanned data
3	OMR		supermarket
4	OCR		bank transaction (ATM)
5	Barcode reader		multiple choice test

13. NAME the THREE **printers** that are normally used nowadays. [3]

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

14. WHICH printer has the following **properties**? Write the name of the appropriate printer in the blank spaces below. [10]

a. The highest resolution: \_\_\_\_\_

b. The slowest speed: \_\_\_\_\_

c. The noisiest: \_\_\_\_\_

- d. Has a good quality photo-printing: \_\_\_\_\_
- e. The cheapest printer: \_\_\_\_\_
- f. The quietest printer: \_\_\_\_\_
- g. The least expensive to maintain: \_\_\_\_\_
- h. The most expensive to maintain: \_\_\_\_\_
- i. Is used mostly at homes: \_\_\_\_\_
- j. Is used at offices: \_\_\_\_\_

15. What is the DIFFERENCE between a **flat-bed** and a **drum** plotter? [2]

Flat-bed: \_\_\_\_\_

Drum: \_\_\_\_\_

16. ANSWER the following with **TRUE** or **FALSE**. [3]

	TRUE	FALSE
a. Robots are considered as output devices.		
b. Braille printers are used by visually-impaired people.		
c. Braille printers are very quiet and cheap.		
d. Raster images are more accurate than vector images.		
e. The resolution of a monitor refers to the number of pixels that a screen consists of.		
f. Serial data transfer sends simultaneously.		

17. WHAT is the **purpose** of an I/O buffer? [3]

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18. WHAT do the abbreviations RAM and ROM **stand for**? [2]

RAM: \_\_\_\_\_

ROM: \_\_\_\_\_

19. Name TWO **differences** between RAM and ROM. [4]

RAM	ROM

20. MATCH the following **types** of ROM with their **definitions**. [1½]

1	PROM
2	EPROM
3	EEPROM

	can delete parts of the data.
	can save on it only once.
	can only delete all the data.

21. MATCH the following **types** of ROM with their **use**. [1½]

1	PROM
2	EPROM
3	EEPROM

	Pen-drive
	CD-Recordable
	CD-Rewritable

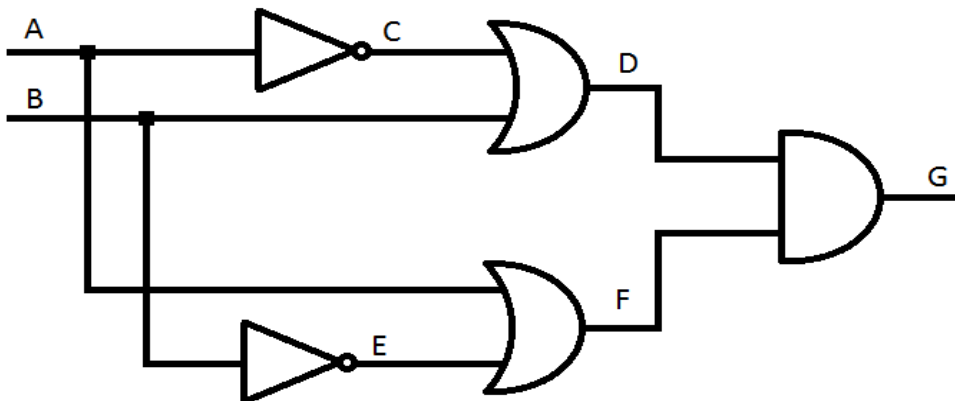
## Section 2: Number Systems and Computer Logic

1. CONVERT the following numbers between binary, hexadecimal and decimal. [12]

Binary	Decimal	Hexadecimal
0101101 <sub>2</sub>		
	21 <sub>10</sub>	
		A0 <sub>16</sub>

*Working Space:*

2. FILL in the truth table for the following logic circuit. [14]



A	B	C	D	E	F	G