

SUMMARY QUIZ₁₀

X3091 _ _ _ Name:.....

X3091 _ _ _

Section I

Definitions	24	
Environment	16	
Operating System	10	
Sub-Total	50	

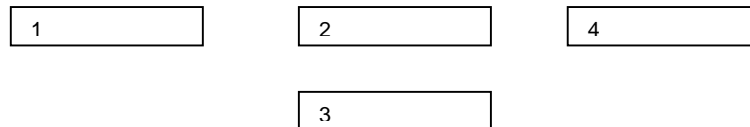
Section II

Hardware	8	
Binary / ASCII	30	
Acronyms	12	
Sub-Total	50	

Section I
Section II
Total
Percentage

DEFINITIONS

- 1 Below is an incomplete diagram used in defining "What is a computer." Label each element in the following diagram, and connect arrows where appropriate. (1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 marks)



- 2 In your own words, and using the above diagram as a reference point, describe "What is a computer ?" (1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 marks)

- 3 Give at least two examples of devices for each of the "boxes" shown above. Name the "box" you are referring to. (2 + 2 + 2 + 2 marks)

1

3

2

4

ENVIRONMENT

- 4 Describe the problem that can occur to computers by the environmental problem of "Humidity," and what is one solution to this problem? (2 + 2 marks)

5. What is a power surge and what problem can this cause to your computer. Provide one solution to minimise the effects of a power surge to your computer. (2 + 2 + 2 marks)
6. What is a power spike and what is a common cause of a power spike. Provide one solution to minimise the effects of a power spike to your computer. (2 + 2 + 2 marks)

OPERATING SYSTEM

7. The Operating System manages a number of different activities of the computer. List at least four major functions that are the responsibility of the Operating System (1 + 1 + 1 + 1 marks)
1. 3.
2. 4.
8. Provide a description for two functions of an Operating System as listed above. (2 + 2 marks)

1. 2.
9. Describe one difference between a Disk based Operating System and a chip-based Operating System (2 marks)

HARDWARE

10. Describe one technology, material, difference between RAM and Disk Storage ? (if you cannot understand this question, list all the differences that you know) (1 mark)
11. What effect does the technical difference between RAM and Disk Storage have on the speed, storage, and cost ? (Hint: Describe whether RAM or Disk Storage is faster/slower etc.) (1 + 1 + 1 mark)

1 Speed

2 Storage

3 Cost

12. When turning on and off a computer, we should go through the computer's "shutdown process". Describe why we should use the "shutdown process." (2 marks)
13. Describe the steps you would use to change the time shown on your computer. (2 marks)

BINARY AND ASCII

14. Translate the following Binary numbers, to their Decimal equivalent (5 marks)

Binary	Decimal
100 1110	
1101 0000	
10 1010	
1 0001 0100	
100 1001	

Table ASCII representation of capital letters

BYTE		BYTE	
A		N	100 1110
B	100 0010	O	
C	100 0011	P	101 0000
D	100 0100	Q	101 0001
E		R	101 0010
F	100 0110	S	101 0011
G	100 0111	T	101 0100
H		U	
I		V	101 0110
J	100 1010	W	101 0111
K	100 1011	X	101 1000
L		Y	
M	100 1101	Z	101 1010

Given the following incomplete table, convert the ASCII binary to ASCII text, and ASCII text to ASCII binary listed below.

15. Convert the following ASCII text to ASCII binary (15 marks)

H	T	W
E	O	H
L	D	I
L	A	L
O	Y	E

16. Convert the following ASCII binary to ASCII text

(10 marks)

100 0110 101 0100

101 0010 100 1111

100 1001 100 0100

100 0100 100 0001

100 0001 101 1001

ACRONYMS AND PHRASES:

1 Define the meaning of the following acronyms and phrases commonly found in the Computer Industry: (12 marks)

Acronym	Extended Meaning	Acronym	Extended Meaning
WIMP		CRT	
ASCII		RAM	
Bit		FD	
OS		HD	
CD		ESC	
ROM		GUI	