

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF SCIENCE AND ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE
CS101 - INTRODUCTION TO COMPUTER SCIENCE

TIME: 2 HOURS

TOTAL MARKS: 100

INSTRUCTIONS TO CANDIDATES

MAR 2024

Answer all questions.

Section A carries 40 marks, Section B 40 marks and Section C 20 marks

SECTION A [40 marks]

1. The ALU of a computer contains a number of high-speed storage elements called [1]
2. A high-quality CAD system uses the ----- printer for printing drawing and graphs [1]
3. In Microsoft Excel, the _____ bar show the used formula of selected active cell? [1]
4. The linking of computers with a communication system is called [1]
5. Which category of computers would you place an N- series Nokia phone [1]
6. A device driver is___ [1]
7. What is a NIC? [1]
8. How many bits is a kilobyte? [1]
9. The Zebra stripped identifier on a store product is called [1]
10. In Microsoft Excel, _____ is the shortcut to highlight the whole column. [1]
11. The output quality of a printer is measured by ----- [1]
12. VDU stands for_____ [1]
13. A legend with respect to a spreadsheet is..... [1]
14. List any **two** examples of web browsers. [2]
15. MICR is used primarily in_____ [1]

16. Printers that form characters by physically striking the paper are called [1]
17. List any three Internet Service Providers in Zimbabwe. [3]
18. Which keyboard key deletes the character to the left of the insertion point? [1]
19. A device that inputs the sound made by a human voice is called _____ [1]
20. State any two examples of devices that serve only as an input device. [2]
21. There are a number of operating systems today in the market for mobile and personal computers. State any two that are command based. [2]
22. "Ctrl + Z", is a shortcut for _____. [1]
23. Computers have evolved through a number of generations.
List any four characteristics of the first generation of computers. [4]
24. When using Google services, the process of creating a new account on Google platform is called ----- [1]
25. In Internet terminology, what does the acronym WYSIWYG stand for? [1]
26. What is the name given to the computer's short-term memory that is lost when the computer is turned off? [1]
27. The slide that is used to add notes and content about the topic being presented is called the _____. [1]
28. If a 5-minute song is sampled at 44 kHz, and each sample is stored as two 8-bit numbers (stereo), it will need that much space: [1]
29. The process of removing unwanted part of an image in MS Word is called _____ [1]
30. What enables us to send the same letter to different persons? [1]
31. _____ and _____ are used for creating ordered/unordered list in a document. [2]
32. Another name for a pre-programmed formula in Excel is [1]

Section B [40 Marks]

Question 1

a) Explain the following giving an example of each

- i. Secondary storage [3]
- ii. Bespoke software [3]

b) discuss any five factors should be taken into consideration when buying computer hardware for any organisation like Bindura University of Science Education [10]

Question 2

- a) Explain the following modes of communication giving an example of where the mode is appropriately used:
- i. Half duplex transmission [2]
 - ii. Full duplex transmission [2]
- b) List any four signs and symptoms of a computer virus [4]

Question 3

- a) Computers can affect the health of users. Give and explain any three known side effects of computers on users [6]
- b) Computer and data security are an area that demands heavy investment of financial and at times human resources. Give five measures that can be taken to ensure that computer and data security is maintained. [10]

Section C [20 Marks]

Question 3

Use diagram in Table 1 to answer this question.

BUSE EXPENSES

	A	B	C	D	E	F	G	H
1	COSTS	Jan	Feb	Mar	Apr	Total	Average	interest
2	Bank loans	\$180	\$140	\$190	\$300	xxx	xxx	abc
3	Transport	\$250	\$250	\$250	\$120			
4	Accommodation	\$300	\$700	\$500	\$500			
5	Stationery	\$100	\$500	\$100	\$180			
6	Entertainment	\$90	\$90	\$124	\$250			
7	Food	\$800	\$600	\$1200	\$600			
8	Other expenses	\$600	\$150	\$100	\$200			
9	Total expenses	xxx						
10	Bank loans less expenses	xxx						
11	Minimum expenses	xxx						

12	Maximum expenses	xxx						
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Table 1: College expenses

a. Using excel formula to:

- i. Write a valid formula to calculate the values represented by XXXs [10]
- ii. Given that interest is calculated as follows

- For Total below \$1000, an interest of 5% is charged, for total below \$1500 an interest of 10% is charged and for Total above \$2000 an interest of 12% is charged otherwise an interest of 15% is charged

Write an excel formula to calculate interest represented by abc [4]

b. Use the table 2 to answer this question.

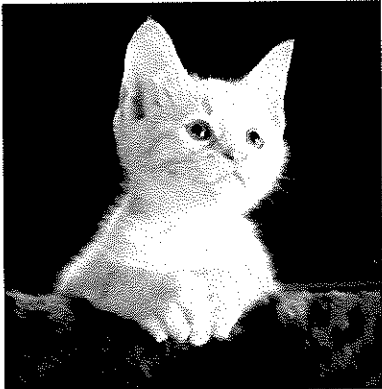
	<p>List of pets:</p> <ul style="list-style-type: none"> • Cat • <u>Dog</u> • Mouse • Snake
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Table 2: Table created using Microsoft word

Outline all the steps you should take to come up with the diagram in **Figure 1** using Microsoft word. [6]

END OF PAPER