

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

APR 2025

Answer all questions.

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

SECTION A [40 marks]

1. The smallest unit of data in a computer is a ____ [1]
2. Name two types of primary memory used in computers. [2]
3. The shortcut key to open a new tab in a web browser is ____ [1]
4. The "Ctrl + C" keyboard shortcut is used to _____. [1]
5. The "Ctrl + V" shortcut is used to _____. [1]
6. A storage device that uses magnetic disks to store data is called a _____. [1]
7. The software that controls and manages hardware and basic system operations is called a(n) _____. [1]
8. The process of securing data during transfer over a network is known as _____. [1]
9. A program designed to replicate itself and spread to other computers is called a _____. [1]

10. A predefined formula in spreadsheets used to perform calculations is called a _____. [1]
11. Examples of social media platforms are _____ and _____. [2]
12. A highlighted cell in Excel indicates the _____ cell. [1]
13. A platform that allows users to store, access, and share files over the Internet is called a _____. [1]
14. Which key is used to switch between open applications on a Windows computer? [1]
15. The default file extension for Word documents is _____. [1]
16. List two examples of biometric authentication methods. [2]
17. Write the full meaning of the following abbreviations:
- i. IoT
 - ii. AI
 - iii. USB 3.0 [3]
18. The acronym URL stands for _____. [1]
19. The tool used to check the spelling of words in a document is called a _____. [1]
20. The two main components of a computer's motherboard are the _____ and the _____. [2]
21. Computers that perform specialized tasks, such as traffic control, are known as _____. [1]
22. If you shut down a computer, all unsaved work in _____ memory is lost. [1]
23. The first slide in a presentation, often setting the theme, is called the _____. [1]
24. A small letter or number appearing below the normal text line is called a subscript (True/False). [1]
25. The process of removing unnecessary parts of a video is called _____. [1]

26. Devices like USB flash drives and external hard drives are classified as _____. [1]
27. One GB is equal to _____ MB. [1]
28. A common method for backing up data online is called _____. [1]
29. The process of remotely accessing a computer over the Internet is known as _____. [1]
30. _____ is the feature in Microsoft Word that allows you to check for grammatical and spelling errors. [1]
31. In Microsoft Excel, a formula that starts with _____ calculates the sum of a range of cells. [1]
32. TRUE/FALSE: In PowerPoint, you can use transitions to animate the movement between slides. [1]
33. TRUE/FALSE: In Microsoft PowerPoint, you can use slide layouts to ensure consistent formatting across your presentation. [1]
34. TRUE/FALSE: In Microsoft Excel, you can use the "Freeze Panes" option to keep specific rows or columns visible while scrolling through a large worksheet. [1]

SECTION B

[40 marks]

Question 1

- a. Examine the influence of Artificial Intelligence on healthcare systems, focusing on its role in diagnosis and treatment innovations. [6]
- b. Bindura University of Science Education relies heavily on firewalls to safeguard its network infrastructure. Explain the importance of firewalls in securing networks and describe how they prevent unauthorized access to sensitive data. [5]
- c. Identify a recent ransomware attack and analyse its impact on the affected organization and its stakeholders. [5]
- d. State any four companies that specialize in creating software-based products [4]

Question 2

- a. Explain the following concepts in cybersecurity:
 - a. Denial-of-Service (DoS) attacks [2]
 - b. Social engineering [2]
 - c. Malware [2]
- b. Explore the role of wearable technology within the Internet of Things (IoT), giving examples of devices that enhance personal health monitoring. [4]
- c. Digital transformation in education has accelerated since the COVID-19 pandemic.
- d. Discuss how learning management systems (LMS) like Moodle or Google Classroom provide personalized learning pathways. [6]
- e. Explain how virtual reality (VR) and augmented reality (AR) tools support collaborative learning experiences in education. [4]

SECTION C

[20 marks]

Question 1

Use table 1.1 for this question.

Good-To-Go Bagels

	A	B	C	D	E	F	G
1	ITEMS	Quantity	Unit cost	Units/price	Total cost	Total Sales	Profit
2	Plain buns	950	70	120	Xxx	Xxx	Xxx
3	Bagels	860	80	160			
4	Tea loaf	270	120	230			
5	Muffins	1280	250	300			
6	Queen cakes	960	150	300			
7	Apple pies	120	60	90			
8	Pretzels	620	75	200			
9	Prime white loaf	240	120	250			
10							
11	Total				Xxx		
12	Average	Xxx					

Table 1.1

- Use formulae to calculate the values represented by xxxxs [15]
- State the steps to follow when one wants to insert a pie chart for **Good-To-Go Bagels** using items and Unit Cost [5]

*****END OF PAPER*****