



Kasarani Campus  
Off Thika Road  
P. O. Box 49274, 00101  
NAIROBI  
Westlands Campus  
Pamstech House  
Woodvale Grove  
Tel. 4442212  
Fax: 4444175

**KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATIONS, 2024/2025 ACADEMIC YEAR**  
**FIRST YEAR, FIRST SEMESTER EXAMINATION**  
**FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

**KCS 2100: FUNDAMENTALS OF COMPUTING**

**DATE: 11<sup>TH</sup> DECEMBER, 2024**

**TIME: 2:30PM-4:30PM**

**INSTRUCTIONS TO CANDIDATES**

**ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE: COMPULSORY (30 MARKS)**

a). Type the following document and answer the questions that follow;

Technology has transformed society by enhancing communication and access to information. From smartphones to social media, technology connects people instantly, breaking geographical barriers. It has also revolutionized education, allowing for remote learning and access to a wealth of resources that were previously unavailable.

However, this reliance on technology comes with challenges, including privacy concerns and potential social isolation. Despite these issues, technology drives innovation and improves quality of life. As we embrace its benefits, it is essential to balance technological advancement with the preservation of our fundamental values and human connections.

b). Format the above document as follows;

- i). Create a title for your essay, "The Impact of Technology on Society." **(2 Marks)**
- ii). Use Times New Roman, font size 12 for the body text and 14 for the title. **(2 Marks)**
- iii). Align the body text to the left and use 1.5 line spacing for the paragraphs. **(2 Marks)**
- iv). Include your name and your admission number in the header of the document. **(2 Marks)**
- v). Add a footer that includes the page number centered at the bottom of the page. **(2 Marks)**
- vi). Set the page margins to 1 inch on all sides and ensure the essay fits within a single page. **(2 Marks)**
- vii). Summarize the key impacts of technology using a bulleted list (at least three points). **(3 Marks)**
- viii). Insert a relevant image (e.g., a technology-related photo) in the document and caption it. **(3 Marks)**
- ix). Insert a simple table (2 columns x 3 rows) summarizing the benefits and challenges of technology. **(4 Marks)**
- x). Insert a text box with a quote about technology that you find inspiring. Format the text box with a border and background colour of your choice. **(4 Marks)**
- xi). Insert a watermark of your choice on the document. **(2 Marks)**
- xii). Change the page background to light blue. **(1 Mark)**
- xiii). Save the document with your name and admission number. For example;  
"KCS\_001\_24\_Alice\_Mbugua.docx". **(1 Mark)**

## **QUESTION TWO: (15 MARKS)**

The below Excel table extract indicates marks obtained by students in their course work and Exams respectively.

- a). Use the Microsoft Excel to create the following table and answer the questions that follow; **(1 Mark)**

	A	B	C	D
1	<b>Student</b>	<b>Course Work</b>	<b>Exam</b>	<b>Average Score</b>
2	Anne	56	60	
3	Paula	62	55	
4	Milcah	38	52	
5	Ruth	56	49	
6	Yvonne	51	39	
7	Mary	45	42	
8	Alice	44	58	
9	<b>SUM</b>			

- b) Insert a function to calculate the sum of course work for all the students. **(3 Marks)**
- c) Insert a function to calculate the sum of the Exam marks for all the students. **(2 Marks)**
- d) Insert a formula to calculate the Average score for Ruth (course Work and Exam). **(2 Marks)**
- e). Indicate the function for calculating the minimum score of all the students **(2 Marks)**
- f). Indicate the function for calculating the highest score of all the students **(2 Marks)**
- g). Insert a graph to represent the student's average score. Include a title for your graph and label both the Y and the X- axis. **(3 Marks)**
- h). Save the document with your name and admission number. For example, "KCS\_001\_24\_Alice\_Mbugua.xlsx". **(1 Mark)**

## **QUESTION THREE: (15 MARKS)**

- a). Create a new database named "Library\_Management.accdb." **(2 Marks)**
- b). Create a table named "Books" with the following fields: Book ID, Title, Author, Genre, and Published Year. Set Book ID as the primary key. **(2 Marks)**
- c). Enter sample data for at least five books with realistic titles and authors. **(2 Marks)**
- d). Create a query to display all books by a specific author (e.g., "J.K. Rowling"). Name the query "Books\_By\_Author." **(3 Marks)**
- e). Sort the results by Published Year in descending order. **(2 Marks)**
- f). Generate a report based on the query results and format it neatly for printing. **(2 Marks)**
- g). Save the database with your name and admission number, e.g." KCS\_001\_24\_Alice\_Mbugua.accdb". **(2 Marks)**

## **QUESTION FOUR: (15 MARKS)**

- a). Create a 5-slide presentation titled "My favourite animal." **(2 Marks)**
- b). Slide 1 – This should be the title slide with your name and the date. **(2 Marks)**
- c). Slide 2 - Introduce your favorite animal with a brief description. **(2 Marks)**
- d). Slide 3- List three interesting facts about your favorite animal using bullet points. **(2 Marks)**

- e). Slide 4- Include a picture of your favourite animal and describe where it lives. **(2 Marks)**
- f). Slide 5 - Share why you like this animal and conclude with an invitation for questions. **(2 Marks)**
- g). Apply a fun and colorful design theme throughout the presentation, ensuring consistent fonts and layout. **(1 Marks)**
- h). Add transitions between slides and animations to at least one element on each slide. **(1 Marks)**
- i). Save the presentation with your name, e.g. " KCS\_001\_24\_Alice\_Mbugua.pptx" **(1 Marks)**

### **QUESTION FIVE: (15 MARKS)**

a). Create an Excel spreadsheet with the following data:

- Column A: Item Names (Apples, Bananas, Oranges, Grapes)
- Column B: Quantity Sold (10, 15, 8, 12)
- Column C: Price per Item (5, 3, 4, 6)

Use Excel functions to calculate the Total Sales in Column D, and then find the Total Revenue (Sum of Column D).

- Save the file with your name, e.g " "KCS\_001\_24\_Alice\_Mbugua.xlsx " **(5 Marks)**

b). i). Create a 5-slide PowerPoint presentation on the topic "My Favourite vacation spot".

- Slide 1: Title Slide with the name of the vacation spot
- Slide 2: A brief introduction to the location
- Slide 3: Attractions and Activities (use bullet points)
- Slide 4: Why you recommend it (use images or visuals)
- Slide 5: Conclusion with a thank you message. **(3 Marks)**

ii). Apply slide transitions to all slides (use different transition effects).

Add animation to the text on Slide 3 so that each bullet point appears one by one (use the "Appear" animation). **(3 Marks)**

iii). Apply a theme to your presentation. **(3 Marks)**

iv). Save the presentation with your name, e.g. "KCS\_001\_24\_Alice\_Mbugua.pptx" **(1 Mark)**