



# MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

## FACULTY OF ENGINEERING, APPLIED SCIENCES AND TECHNOLOGY

DEPARTMENT: COMPUTER SCIENCE AND INFORMATION SYSTEMS

MODULE: INTRODUCTION TO COMPUTER SCIENCE

CODE: INSY102

SESSIONAL EXAMINATIONS

APRIL- 2024

DURATION: 3 HOURS

EXAMINER: MR N. MATANANA AND MR A. MAKANDWA

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### INSTRUCTIONS

1. Answer **ALL** *questions* in Section A **and** Section B
2. Answer Any **Two (2)** *questions* from Section C and Section D
3. Start a new question on a fresh page
4. Total marks 100

*Additional material(s): None*

## SECTION A – ANSWER ALL QUESTIONS

### Question 1

	A	B	C	D	E	F	G	H
1	Reg Number	Surname	Name	Continuous Assessment Mark (out of 30)	Exam Mark Obtained (out of 100)	Examination Mark Contribution(70%)	Final mark (100)	Grade
2	R234567w	Chido	Mufandaziva	23	57			
3	R208907p	Leon	Goto	0	65			
4	R215461h	Clara	Mutora	13	61			
5	R246870x	Fadzai	Dekesa	27	70			
6	R249045j	Kareem	Mpofu		46			
7	r214578k	Reah	Choguma	19	40			
8								

Given a spreadsheet contains student details, apply the formulas you learnt in answering the following questions:

- Insert a formula that reduces the examination mark to 70 for Clara. **(2 Marks)**
- Insert a formula that adds Continuous Assessment Mark and Examination mark to get the Final Mark for Kreem. **(1 Mark)**
- Insert a formula to compute the following grades given the following parameters:

$(75-100 = \mathbf{1}, 65 - 74 = \mathbf{2.1}, 60 - 64 = \mathbf{2.2}, 50 - 59 = \mathbf{3}, 0 - 49 = \mathbf{F})$  **(3 Marks)**

### Question 2

- With reference to Google Workspace (Also known as G Suite):
  - Outline the steps taken to schedule a meeting and send invitations to participants using Google Calendar, including adding conference details and setting reminders. **(3 Marks)**

ii. Explain the steps taken to create and share a Google Sheets spreadsheet with specific individuals, granting them access to view or edit the data.

**(2 Marks)**

iii. Define real-time collaboration in Google Docs.

**(2 Mark)**

### **Question 3**

a. Explain the steps taken to insert a table of contents in Microsoft Word and update it automatically.

**(4 Marks)**

b. Outline steps involved when creating a query in Access to retrieve specific data from multiple tables based on certain criteria.

**(3 Marks)**

## **SECTION B - ANSWER ALL QUESTIONS**

### **Question 4**

Outline the steps that one goes through when searching for an article in the electronic journal database that is housed in the Manicaland State University of Applied Sciences (MSUAS) Institutional Repository.

**(10 Marks)**

## **SECTION C - ANSWER ANY TWO QUESTIONS**

### **Question 5**

- a. An advertising company has recently purchased an image-editing software package for one of its workstation computers. This computer is accessible to all employees. Outline **THREE** hardware specification requirements other than RAM which may need to be taken into account before installing the package. **(3 Marks)**
- b. Explain the functions of each of the following, computer types
- i. Super computer **(2 Marks)**
  - ii. Minicomputer **(2 Marks)**
  - iii. Micro Computer **(2 Marks)**
  - iv. Embedded computer **(2 Marks)**
- c. Differentiate between System Software and Application Software. **(4 Marks)**

### **Question 6**

- a. Define the term malware. **(1 Mark)**
- b. Explain any three examples of common types of malware. **(3 Marks)**
- c. Discuss the importance of strong passwords and multi-factor authentication in ensuring cyber security. **(4 Marks)**
- d. Explore how the evolution of communication technology particularly with the advent of Artificial intelligence and Machine learning has affected education. **(7 Marks)**

**Question 7**

- a. Explain how computer on a star network topology communicate with aid of a diagram **(3 Marks)**
- b. Computers can be interconnected through either wired or wireless connectivity. Explain any three ways in which:
- i. Wireless connectivity can be established **(3 Marks)**
  - ii. Wired connectivity can be established **(3 Marks)**
- c. Discuss the ethical considerations related to online privacy and data sharing. **(6 Marks)**

**SECTION D - ANSWER ANY TWO QUESTIONS****Question 8**

Discuss why researchers and scholars generally prefer to access online information at the expense of printed one. **(20 Marks)**

**Question 9**

Bibliographies, Indexes, Library catalogues and Abstracts are information utilities that are used to locate information. Explain how researchers make use of these information access tools when finding information. **(20 Marks)**

**Question 10**

It is common practice that all Information Centres, Resource Centres and Libraries always organize their resources or materials in a systematic order of their choice. Discuss the benefits of organizing information resources in a systematic order. **(20 Marks)**

**END OF EXAMINATION**