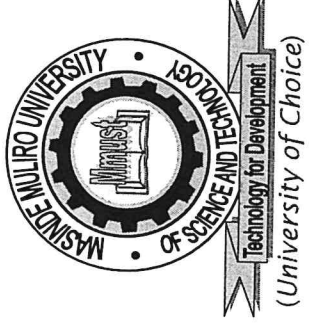


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**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS
FOR THE DEGREE
IN
GLOBAL HEALTH**

COURSE CODE: NCG 121

**COURSE TITLE: INTRODUCTION TO SPREADSHEETS AND
DATABASES**

DATE: Wednesday 20/04/2022 **TIME: 8:00a.m-11:00a.m**

INSTRUCTIONS TO CANDIDATES

Answer Questions **ONE** and **ANY OTHER TWO**.

TIME: 3 Hours

MMUST observes **ZERO** tolerance to examination cheating

This Paper Consists of 4 Pages. Please Turn Over. ▲

QUESTION ONE (30 MARKS)-COMPULSORY

- a) Define the following terms
 i) Computer (2 Marks)
 ii) Data (2 Marks)
- b) List FOUR different input devices and describe how each can be used. (4 Marks)
- c) Distinguish between the following (8 Marks)
 i) Application software and system software
 ii) Table and query
 iii) Form and report
 iv) Keyboard and printer
- d) What are the differences between spreadsheets and databases? (4 Marks)
- e) Define the terms **record** and **field** and give examples of each in a database. (2 Marks)
- f) Explain uses of spreadsheets in health profession or health institutions. (4 Marks)
- g) What is the difference between CUT/PASTE and COPY/PASTE when using application softwares such as spreadsheets and databases? (2 Marks)
- h) Differentiate between hardware and software and give TWO examples for each. (4 Marks)

QUESTION TWO (20 MARKS)

- a) Distinguish between hardware and software and give TWO example of each. (4 Marks)
- b) Give TWO examples of spreadsheet applications. (2 Marks)
- c) Differentiate between the following terms as used in spreadsheets (6 Marks)
 i) Workbook and a Worksheet
 ii) AutoFill and AutoSum
 iii) Absolute referencing and Relative referencing
- d) Explain the main features of a spreadsheet that makes it suitable for preparing budgets. (3 Marks)
- e) Study the Excel table below and answer the question that follows.

	A	B	C	D	E	F	G
1	Name	Math	Physics	Chemistry	Total	Average	Grade
2	John Mwangi	49	70	80	C		
3	Sam Yong	-	70	78		G	
4	Okoyo Dodi	67	44	59			F
5	Joseph Fatulu	60	50	49		A	
6	Average		B				
7	Count			Z			

Write formulas to calculate results in cells indicated by C, G, F, B, and Z. (5 Marks)

Note that grades are classified as follows:

A grade **A** is between 70 and 100 marks

A grade **B** is between 60 and 69 marks

A grade **C** is between 50 and 59 marks

A grade **D** is between 40 and 49 marks

A grade **F** is between 0 and 39 marks

QUESTION THREE (20 MARKS)

- a) Explain THREE types of relationships in a database. (6 Marks)
- b) Giving examples, state any FOUR datatypes that can exist in a table in Ms. Access. (4 Marks)
- c) Spreadsheets and databases contain vital data in any organization. Discuss ways in which data in spreadsheets and databases can be protected from loss or security breaches in health institutions. (10 Marks)

QUESTION FOUR (20 MARKS)

- a) Outline FIVE reasons that may influence health organizations to incorporate the use of computers in their operations. (5 Marks)
- b) Define the following terms as used in Database Management System. (3 Marks)
 - i) Attribute
 - ii) Field
 - iii) Entity
- c) What is the difference between a primary key and a foreign key. (2 Marks)
- d) Explain FOUR objects in the database window. (8 Marks)
- e) Give TWO examples of database softwares. (2 Marks)

QUESTION FIVE (20 MARKS)

- a) Briefly describe FOUR Data types used when creating a table in design view and give examples of each data type as used in Ms. Access (8 Marks)
- b) Outline FOUR uses of databases in organizations. (4 Marks)
- c) Discuss the advantages and disadvantages of use of computers in health related professions. (8 Marks)