2920/102B
COMPUTER APPLICATIONS I (PRACTICAL)
Paper 2
November 2021
Time: 1 hour

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY I

MODULE I

COMPUTER APPLICATIONS I (PRACTICAL)

Paper 2

1 hour

INSTRUCTIONS TO CANDIDATES

*You have **Ten** minutes to read through the instructions and questions before starting the examination.*
Any problem with the computer should be reported to the invigilator immediately.
Direct any question(s) to the invigilator only. Conversing with fellow students may lead to disqualification.
*Write your **name** and **index number** on the answer booklet and the rewritable CD.*
*This paper consists of **Four** tasks. Perform any **Two** tasks.*
*Each task carries **20** marks.*
Read the instructions of each task carefully.
Print on one side of the paper(s) only and use a fresh sheet of paper for each question at the end of the examination.
*Hand over your **printout** and the **rewritable CD** to the invigilator at the end of the examination.*
Candidates should answer the questions in English.

This paper consists of 10 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SPECIFIC INSTRUCTIONS TO CANDIDATE

1. Create a folder named **KNECEXAM** on the desktop to store all the work done on this paper.

2. Ensure that the **KNECEXAM** folder and all its content is burnt onto the **Rewritable CD** at the end of the examination

TASK 1

(a) Open a word processing program and create the following document as it appears. *Save* the document as *Mushroom* in the **KNECEXAM** folder. (12 marks)

MUSHROOM FARMING

One of the discussions when it comes to mushroom farming is the argument whether mushrooms are vegetables or fruits. Scientifically speaking, mushrooms are neither considered to be vegetable or fruit. They are actually a fungus type. Mushrooms have important nutritional elements like folate, vitamin C, iron, zinc, and manganese.

Types of Mushrooms

Mushrooms are categorised as follows for easier groupings:

1. Cultivated mushrooms
2. Wild mushrooms

Cultivated mushrooms

They are those that are cultivated indoors under controlled conditions and sold in markets, shops or grocery.

The following are some types of cultivated mushrooms that one may need to know when investing in this sector.

Types of cultivated mushrooms

- White button mushroom
- Black trumpets
- Button

Wild Mushroom

These are mushrooms that grows under uncontrolled conditions

Planting Process for Cultivated Mushrooms

(b) Ksmart College intends to use mail merge feature to create letters inviting their stakeholders for a Thanks Giving Day.

(i) Open a new blank word processing document and create a data source named *thanksgivingday*. Enter the information as it appears. Save the document in the **KNECEXAM** folder. (2½ marks)

Title	Name	Organization	Telephone	Town
Mr	Kenneth	Uwezo Enterprise	0994 555888	Nrb
Mrs	Charity	Kashma manufacturers	0884 666444	Msa
Ms	Esther	Ministry of Youth	0888 222333	Naks
Mr	Gabriel	Whuen Distributors	0676 999777	Eldoret

(ii) Open a new blank word processing document and create the following invitation letter as it appears. *Save* the document as *Invite* in the **KNECEXAM** folder. (2½ marks)

KSMART COLLEGE
P.O BOX 4536 NRB

TO <<Title >> << Name >>
<< Telephone >>
<< Organization >>
<< Town >>

Dear <<Name>>

SUBJECT: INVITATION FOR A THANKS GIVING DAY

It is with great pleasure that I invite you to our first Thanks Giving day that will be held on Friday the 23rd April 2020. Guests are expected to be seated by 9.30 am at the graduation square.

Your presence will be highly appreciated.

Yours faithfully,

Samuel,

PRINCIPAL

(c) (i) Merge the *data source* in (i) to the *invite* document (1½ marks)

(ii) Save the merged document as *letters* in the **KNECEXAM** folder. (½ mark)

(d) Print out later each of the following:

(i) Mushroom

(ii) letters. (1 mark)

TASK 2

Figure 2 is a spreadsheet extract showing the number of cholera cases reported at Biroi Hospital for a period of one week. Use it to answer the questions that follow.

	A	B	D	F	G
1	Number Reported				
2		Morning	Afternoon	Total	
3	Day	Cases	Cases	Cases	Percent
4	Sunday	188	450		
5	Monday	142	211		
6	Tuesday	345	64		
7	Wednesday	282	96		
8	Thursday	378	98		
9	Friday	602	159		
10	Saturday	594	524		
11					
12	Weekly Total				
13	Over 200 cases				

Figure 2

(a) (i) Open a spreadsheet program and key in the data in sheet1 as it appears in Figure 2. Save the workbook as *CHcases* in the **KNECEXAM** folder. (4½ marks)

(ii) Format the column headings in Row3 to an angle of 45^0. (1 mark)

(b) Using a function and cell references only, compute each of the following:

(i) Total cases for morning and afternoon for each day. (1 mark)

(ii) Weekly total for both morning and afternoon for the week; (1 mark)

(iii) (I) Cases in percentage for each day using percentage format. (3 marks)

(II) Format the percentage figures to 2 decimal places showing the % sign. (1 mark)

(c) Use a function for each case to compute:

(i) number of days that reported more than 200 cases in the morning in cell B13. (2 marks)

(ii) total cases for the days with more than 500 reported cases in cell D13. (2 marks)

(d) (i) Insert a bar chart that compares *Morning cases* and *Afternoon cases* for the days of the week in a new sheet. Type the chart title as *Reported Cases*. (3 marks)

(ii) Rename the sheet as *Chart Sheet*. (½ mark)

(e) Save the changes to print out later each of the following:

(i) Sheet 1;

(ii) Chart sheet. (1 mark)

TASK 3

Jessy enterprise is a beauty shop that deals with sales of different products to its customers. The management intends to manage its orders using a database. You have been tasked with creating the database.

(a) (i) Open a database program and create a database file named *Jessy* in the **KNECEXAM** folder. (1 mark)

(ii) Create the following tables in the database file created in (i). Save them as *Customer*, *Products* and *Transaction* respectively. (4 marks)

Customer table

Field Name	Data Type
CustomerID	Text
Name	Text
Town	Text
Country	Text

Products table

Field Name	Data Type
ProductID	Text
Product Description	Text
UnitPrice	Currency

Transaction table

Field Name	Data Type
ProductID	Text
CustomerID	Text
Qtyordered	Number
Dateordered	Date

(iii) Create appropriate relationships between the tables. (1 mark)

(iv) Create a form named *frmproducts* that would be used to enter data in table products. (1 mark)

(b) Enter the following data into their respective tables. (5 marks)

Customer			
Customerid	**Name**	**Town**	**Country**
C001	SIMON	DAGORETTI	KENYA
C005	KENNEDY	UGUNJA	KENYA
C202	SUSAN	DODOMA	ARUSHA
C220	CYRUS	ARUSHA	DAR
C307	JANET	JUJA	UGANDA
C325	PETER	KAMPALA	UGANDA

Product		
ProductID	**Product Description**	**UnitPrice**
BD205	MAKE UP KITTY	$2,555.00
IC101	HAIR SHAMPOO	$1,275.00
KL001	ANT AGING CREAM	$3,715.00
MS301	SHOWEL GEL	$4,155.00
SD201	FRANGRANCE	$3,035.00

Transaction			
ProductID	**CustomerID**	**Qtyordered**	**Dateordered**
BD205	C001	15	2/3/2020
IC101	C005	40	1/8/2020
MS301	C005	20	3/2/2020
MS301	C005	15	8/2/2020
KL001	C202	12	1/16/2020
SD201	C220	54	2/17/2020
KL001	C220	17	5/2/2020
MZ3100	C307	60	2/4/2020
IC101	C307	8	8/3/2020

(c) (i) Create a query that would display the fields *CustomerName*, *Product description*, *Qtyordered*, *Unitprice*, *Dateordered* and a calculated field for *Amount ordered* for the customers who ordered the products in the month of February. Save query as *Febqry*. (5 marks)

(ii) Create a report for the query created in (i). Save it as *Febrpt*. (1 mark)

(d) Print out later each of the following:

(i) the three tables;

(ii) Febqry;

(iii) Febrpt. (2 marks)

TASK 4

A lecturer intends to use a presentation program to teach his lesson. You have been tasked to prepare the slides as shown in Figure 3.

Slide No.	Content
1	**HYPOTHESIS TESTING** **BY: PROFESSOR JK**
2	**Introduction** ❖ The Null Hypothesis ❖ Type I and Type II Error ❖ Using Statistics to test the Null Hypothesis ❖ The Logic of Data Analysis
3	❖ Research question: ➢ Non-directional: ▪ No stated expectation about outcome ➢ Example: ▪ Do boys and girls differ in terms of conversational memory? ❖ Hypothesis: ➢ Statement of expected relationship ▪ Directionality of relationship ➢ Example: ▪ Girls will have greater conversational memory than boys

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Steps in Hypothesis Testing

1. State the hypotheses and select an α level
2. Locate the critical region.
3. Compute the test statistic.
4. Interpret the results

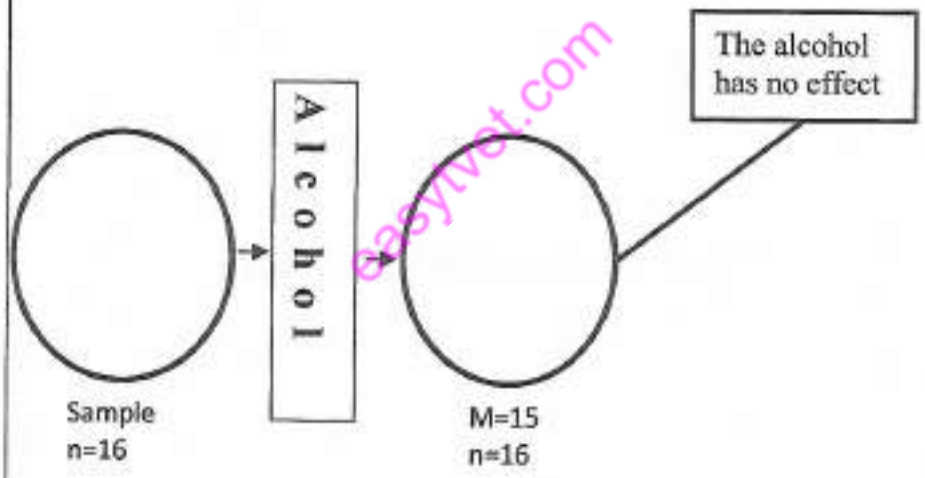
5

Potential Outcomes of Testing

DECISION	
Accept Null	**Reject Null**
Correct Decision	Type I Error
Type II Error	Correct Decision

6

Example



7

The end

Figure 3

(a) Open a presentation program and create the slides as they appear in figure 3 using appropriate slide layouts. Save the presentation as *Hypotest* in the KNECEXAM folder. (15 ½ marks)

(b) Insert the following as footer to all the slides:

(i) the text "Hypothesis Testing" to the left;

(ii) the current Date to the right. (2 marks)

(c) Apply the following to all slides:

(i) transition effect of your choice;

(ii) transition speed: *slow*;

(iii) Slide design of your choice. (1½ marks)

(d) Save the changes to print out later *hypotest* as handout with three slides per page. (1 mark)

THIS IS THE LAST PRINTED PAGE.