COMPUTER PP2 2024 KCSE MOCK

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SERIES 1 2024 KCSE MOCK

COMPUTER STUDIES

PRACTICAL

PAPER 2

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES:

1. Type your name and index number at the top right hand corner of each printout.

2. Write your name and index number on the CD.

3. Write the name and version of the software used for each question in the answer sheet.

4. Passwords **should not be used** while saving in the

5. Answer all questions. All questions carry equal marks.

6. Hand in all the **printouts** and the **CD.**

This paper consists of 7 printed pages.

Candidates should check the question paper to ensure that all

pages are printed as indicated and no questions are missing

QUESTION 1: SPREADSHEETS

1. The following are the KCSE results for a certain school in Nyeri. Enter the data as it is in Excel and answer the question that follows.

KIMAKANIA HIGH SCHOOL NYERI													
NAME	Eng	Kis	Mat	Bio	Phy	Chem	Hist	Art	Comp	Bst	Ave. point mark	Overall grade	Rank
THIRU	B+	B	A	B-	A	B	B-	A-					
KIPTOO	A-	B+	A	A-	A	A-	A-			A			
COLLINS	B+	B	A	B+	A	B	B	A					
RONALD	B+	A	A	A-	A	B+	B+		A				
FREDRICK	A	A	A	B	A	A-	A-		B+				
NJEGE	B+	B+	A	A-	A	B+	B+		A				
MUARINE	A	B	A	A	A	A-	A-			B-			
KIBET	B	A-	A	A	A	A	A			A			
WAFULA	B	B	A	B+	A	B-	B-			A			
NDIRANGU	B+	A-	A	B	A	B	B			A			
OTIENO	B+	C	A	A-	A	A-	A-			A			
MATU	B	A-	A	B+	A	B+	B+		A				
KIBUTHA	B	B	A-	B+	A-	B+	B+		A				
KIRURI	A	B+	A	A	A	A-	A-		A				
AMING'A	B	A	A	A-	A	A-	A-			C+			
JACKSON	B+	C+	A	B+	A	A	A		B-				
MUMBI	A-	A-	A-	B+	B+	B+	B+		A				
KIGUTA	B+	A	A	A	A	A-	A-		A				
MWANGI	B	A-	A	B+	A-	A-	A-	A-					

WAMUCIE	B+	B	A	A-	A	A-	A-	A					
MBUGUA	B+	B-	A	B	A-	B-	B-	A					
OGEGA	B-	A-	A-	B-	B+	B	B	C					
HENRY	A-	A-	A	A	A	A	A		D+				
ABDI	A	B+	A	B+	A	A	A		A				
JAMES	B+	C-	A-	B+	A	A	A			B+			

a) Save your work as **Matokeo_Mufti**. [15 Marks]

b) Perform the following calculation for these columns and write down the formulas you used in the spaces provided below each question:

i) Use a formula to get the average point mark in the table above given that,

[3 Marks]

Average Point Mark = Average of (sum of point of all subjects)

GRADE	POINTS
A	**12**
A	**11**
B+	**10**
B	**9**
B-	**8**
C+	**7**

ii) Determine each student's rank using the Ave. Point Mark. [3 Marks]

iii) Use a formula to evaluate the Overall grade using the Ave. Point Mark, given that:

[3 Marks

GRADE	MARKS
A	90-100
A-	81-89
B+	71-80
B	61-70
B-	51-60
C+	41-50
C	36-40
C-	31-35

c. Add in the following table in the same sheet: [5 Marks]

	A	A-	B+	B	B-	C+	C	C-	D+	Number of Students	Max Grade Number	Min Grade Number	Average Mark	Average Grade	Rank	% Above Pass Mark
ENG																
KIS																
MAT																
BIO																
PHY																
CHEM																
HIST																
ART																
BST																
COMP																
Overall Grade																

d. **Calculate the following**:

(**NB//** Write the formulas used in the space provided below each question)

i) **'Number of students'** per grade for each subject, e.g. 10 students got an A in History. [3 Marks]

ii) **'Number of students'** column with the number of students who do the specific subject.
[1 mark]

iii) **'Max Grade Number'** (=the grade with the highest number of students in that subject.)

[1 mark]

iv) 'Min Grade Number' (= the grade with the lowest number of students in that subject.)

[1 mark]

v) 'A subject's Average Mark' = Sum of values for each grade divided by total number of students in that subject (Use the Grade-Value conversion table given in **Qn, 2a)(i)**

[2 Marks]

vi) Average Grade of the Average Mark using the conversion table in **Qn. 2 b(ii) above.**

[2 marks]

vii) Rank of each subject as per its average mark use the conversion table **Qn, 2a)(i) &(iii)**
[4 Marks]

viii) A subject's '% Above pass mark' = Percentage of students who had B- or above in that subject.
[4 Marks]

d) Plot a bar graph of the Subjects against their Average Mark [4 Marks]

e) Put a footnote with your ***name and index number*** in the same sheet and print your work.

[2 Marks]

f) Print the work book [2 Marks]

QUESTION 2: DATABASES

2. Ogeke is the manager of a college's ICT department. He has been told to use Database Management System (DBMS) to update records for a fundraising data. Perform the following operations just like Ogeke would:

a) i) Create a **relational database** with four table; Class List, Family Details, Pledge Contributions and Walk Form Contributions. [4 Marks]

ii) Class List contains the following fields; Class no, first Name, surname. Family Details contains Family Id, Parents Name, Address, City and Class no. Pledge Contributions contains Pledge Id, family Id, Amount Pledged and Amount received. Walk Form contribution contains Walk Id, Class no, Walker Name, Amount Promised and Amount Paid.

iii) Save your database as **Mchango_01** [2 Marks]

b) Input the following Data into Mchango_01 [11 Marks]

CLASS LIST

CLASS NO	FIRST NAME	SURNAME
1	JACOB	MAUNDA
2	JAMES	MAMBO
3	MIKE	OGEKE
4	KEVIN	MALEWA
5	ALI	ABDI
6	PHARELL	OGEGA
7	RICHARD	MOKAYA
8	DENNIS	KIBET

FAMILY DETAILS

FAMILY ID	PARENTS NAME	ADDRESS	CITY	CLASS NO
1	PROF & DR MAUNDA	89722	KISUMU	8
2	DR & MAMBO	55554	NAIROBI	21
3	MR & MRS OGEKE	6935	NYAMIRA	5
4	MR & MRS MALEWA	54897	NAIROBI	1
5	MR & MRS ABDI	12548	WAJIR	2
6	MR & MRS OGEGA	548	NAKURU	3
7	MR & MRS MOKAYA	1254	KISUMU	4
8	MR & MRS KIBET	5778	NAIROBI	6
9	MR & MRS OTIENO	3124	KISUMU	9
10	MR & MRS KOBIA	5546	NAIROBI	10
11	MR & MRS MATASIA	44977	NAKURU	11

9	JOHN	OTIENO
10	WILSON	KOBIA
11	JOHN	MATASIA
12	MOHAMED	ALI
13	JANET	WAMBUI
14	GERALD	KOECH
15	ANDREW	NGUGI
16	MICHAEL	GICHANGA
17	PETER	NG'ANG'A
18	CHRIS	SONKO
19	BENSUNDA	OWINO
20	FRANCO	WAFULA
21	KILLY	WAGAIYU
22	TONY	WAIGANJO

PLEDGE CONTRIBUTIONS

PLEDGE ID	AMOUNT PLEDGED	AMOUNT RECEIVED	FAMILY ID
1	10000	8000	1
2	25600	25600	22
3	7800	6000	2
4	23690	0	3
5	6587	2300	4
6	3690	3560	7
7	5000	500	21
8	2478	1000	19
9	0	0	20
10	35697	0	15
11	2569	2569	12

WALKER FORM CONTRIBUTIONS

WALK ID	WALKER NAME	AMOUNT PROMISED	AMOUNT PAID	CLASS NO
1	GIKONGE	5000	3000	1
2	MORAA	2580	0	10
3	KERUBO	500	6000	16
4	JAMES	20	15	6
5	NJUKI	5980	2300	14
6	SABINA	6300	3560	7
7	JOHN	100	100	22
8	KALVIN	689	0	18
9	KOECH	8595	700	15
10	OTIENO	3695	300	5
11	ABDI	10000	10000	17

i) Create a query that contains the *Parents Name* and the *students' first name* who have '**Promised'** more than **7000**. Save the query as **Promised_Mchango**. [5 Marks]

ii) Make a query and from it produce a report that list the student name and parents names of families who's **Amount Pledged** is equal to **Amount Received** and greater than 0. Save the query as **Received**Q and the Report as **Pledged_Received**. [10 Marks]

iii) Make a query from it to produce a report that calculates the difference between pledge and amount received from each family. Save the query as **Balance** and the Report as **Bal_report**.

[10 Marks]

iv). Create **4 Reports** that can be used to display the *4 tables separately* in the database**.**

Save them as ***PC, WFC, Class_list and Family_Details respectively*** **print these reports**

[4 Marks]

v) Create **four forms** of each table above and save them as respective table names. [4 marks]

THIS IS THE LAST PRINTED PAGE

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Instructions to Candidates

b) Indicate your name and index number at the top right corner of each printout.

c) Write your name and index number on the CD-RW storage medium provided

d) Write the name and version of the software used for each question attempted in the answer sheet.

e) Answer both questions

f) All questions carry equal marks

g) Passwords should not be used while saving in the CD-RW storage medium provided.

h) All answers must be saved in your CD-RW storage medium provided

i) Make a printout of the answers on the answer sheets provided.

j) Arrange your printouts and staple them together.

*k) Hand in all the **printouts** and the CD- RW **storage medium** used.*

l) This paper consists of 5 printed pages.

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

QUESTION 1 - SPREADSHEET

A Company in Mombasa sells computer spare parts to its customers. The Company wishes to work out the pay details for its employees.

EMPLOYEE NAME	YEARS WORKED	BASIC PAY [KSHS]	DEPARTMENT	SALES [KSHS]	HOURS OF OVERTIME
RUKENYA KWENA	5	24,000	ADMIN	16,000	10
BILLY LUCAS	13	28,000	SALES	25,000	11
LILIAN OKOTH	7	17,000	MARKETING	22,000	12
EVANS ONDIEKI	11	18,000	SALES	12,000	15
GEOFFREY MUTUMA	15	26,000	ACCOUNTS	11,000	22
HUMPHREY LOKI	10	25,000	ADMIN	30,000	12
CEDRIC MUKUI	11	19,000	SALES	35,000	33
FREDRICK CHEGE	15	25,000	MARKETTING	14,000	14
OSMAN HUSSEIN	14	23,000	ADMIN	25,000	0
JEREMY NYAMU	18	27,000	ACCOUNT	14,000	7

(a) Using the information above, design a spreadsheet and enter the given data as it appears. Give it the title “COMPANY PAYMENTS”. Save the workbook file as **COMPANY1**

(14marks)

(b) (i) Copy the data into Sheet 2 and rename it as **COMPANY2** and use it to

answerthequestionsthatfollow (2 marks)

(ii) Calculate the total sales and total mileage giving them an appropriate label

(2marks)

(iii) Rotate the column headings to 45° (2 marks)

(iv) The employee's sales commission is calculated as 12% of the employee's sales. Input this commission rate in cell C20 and label it appropriately. Bold the label and change its font to size 16

(4marks)

(v) Insert a new column labeled **'Sales commission'** between 'sales' and 'hours of overtime'.

(2marks)

(vi) Create a formulae to give the amount of sales commission for each employee by making references to sales commission cell.

(3marks)

(c) (i) Convert the basic pay and sales to two decimal places.

(2marks)

(ii) Use a function in a new column labeled REMARK to put the remark 'EXCELLENT' for only those employees whose sales is greater than 22,000, 'GOOD' those employees whose sales are between 15000 to 21999 otherwise the remark should be 'LOW SALES.

(6marks)

(iii) Apply both outline and inside double line border to the worksheet portion with data

(3marks)

(d) Overtime payment is done by multiplying 5% of sales with the hours worked. Use a formula to calculate the overtime pay for each of the employees in a new column labeled "OVERTIME PAY"

(2marks)

(e) Use a function to compute the Total payment of each employee. It should be summation of Basic pay, Sales Commission and Overtime pay. Give it the heading TOTAL PAYMENT. Save the changes. (2marks)

(f) Use an appropriate subtotals function to show how much TOTAL PAYMENT the company gives to employees in each department

(4marks)

(g) Print **COMPANY1, COMPANY2** and **all the formulas used in company2.**

(3marks)

QUESTION 2 - DATABASES

Assuming that you have been approached by an automobile Showroom company to help manage their vehicles database whose details are given below:

(a) Create database named **Magari**

(2marks)

Car Make	RegNo	Type	Year	Value	Owner ID	Owner Name
Toyota	KBD 949U	Coupe	2010	1,200,000	M0001	Faith N.
Nissan	KCT 149E	Wagon	2014	2,500,000	M0002	Jacob W.
Izuzu	KDD 977W	Troupe	2016	4,500,000	M0003	Dan C.
Toyota	KBA 241V	Troupe	2009	900,000	M0002	Jacob W.
Toyota	KBD 049X	Coupe	2010	1,150,000	M0004	Rachael R.
Nissan	KCV 518C	Saloon	2012	1,700,000	M0004	Rachel R.
Subaru	KCY 123Z	Saloon	2014	2,100,000	M0001	Faith N.

(b) Design two Tables named **Cars** and **Owners** to be used to hold the above data. Assign appropriate primary keys for each table. Prepare appropriate input masks to help validate both RegNo and Owner ID field entries

(18marks)

(c) Create a relationship between the tables.

(2marks)

(d) Create forms named "**CarDetails**" with a heading and "**OwnerDetails**". Use them to add car details and owner details records respectfully.

(4marks)

(e) Insert the record below having the following respective details.

(4marks)

Volkswagen	KCV 321D	Beatle	2012	1,325,000	0002	Jacob W.

(f) Add a column into the car table labeled "Date of Service", and add the following dates. Save the changes made.

(4marks)

Date of Service	**OwnerID**
20/092021	M0001
21/10/2021	M0002
10/10/2021	M0003
11/10/2021	M0002
19/11/2021	M0004
21/10/2021	M0004
22/11/2021	M0001

(g) Create a query that retrieves a list of cars and their owners to be serviced on 21/10/2021 or on 22/11/2021. Name it **Service Query.**

(5marks)

(h) Create a tabular report named **NumbOfCars** displaying the cars and their owners; indicating the number of cars each owner has; sort the records with Name in ascending order.

(6marks)

(i) Create a report named **TotalValue Report** that computes and displays the total value of the cars owned by each owner.

(5marks)

(j) Print

(i) The two tables

(ii) The query

(ii) The two reports

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INSTRUCTIONS TO CANDIDATES

(a) Type your name and index number at the top right hand corner of each print out

(b) Write your name and index number on the diskette/CD-R provided

(c) Write the name and version of software used in each question on the answer sheet

(d) Answer **ALL** the questions

(e) Passwords **should not be used** while saving in the diskette/CD-R

(f) All answers **MUST** be saved in the diskette/CD-R

(g) Make print out of answers on the answer sheet provided

FOR EXAMINER'S USE ONLY

Question	Candidate's score
1	
2	
Total score	

This paper consists of 4 printed pages.

Candidates should check to ensure that all pages are printed as indicated and no questions are missing

QUESTION ONE

1. (a) Assume you are the Director AMACO INSURANCE COMPANY LTD you want to update your customers on the current dues as per the insurance cover each client have. Use mail merge to write an official letter to **FIVE CUSTOMERS** informing them of this. Your letter must meet the following conditions.

i. Must have the header at the top with the company's name as the letter head (2mks)

ii. Must have footer at the bottom indicating the current date and time, left aligned. (2mks)

iii. The insurance will cover the vehicles and each client due, car number will not be the same. (2mks)

iv The address lines will include

Title

First name

Last name

Address

Country

Car no plate

Amount due (14mks)

(b) (i) Prepare the table below in Ms word and then apply formatting as follows and save as MSS (8 mks)

MEYSA SYSTEMS AND SERVICES					
Technical information			**Action taken**		
Machine description	Problems found		Diagnostic checks	Solutions	
Compaq / evo	hardware	software	Memory video	1	Replacing vga
6522	☐	☐	Faulty component	2	Installing drivers
Desktop	No display		VGA CARD	3	Rebooting system

(ii) Format the table with border line colour red and choose double line (5mks)

(iii) Shade the table to tight green colour for the first two rows and light blue shading for therest of the table (5mks)

(c) Type the paragraph below, save it as computer and apply formatting as stated (4mks)

Computer Program is a set of instructions that direct a computer to perform some processing function or combination of functions. For the instructions to be carried out a computer must execute a program, that is, the computer reads the program, and then follows the steps encoded in the program in a precise order until completion. A program can be executed many different times, with each execution yielding a potentially different result depending upon the options and data that the user gives the computer.

(i) The text "computer program" should be the title, change its case to upper case font TREBUCHET MS size 16, colour green (2mks)

(ii). Find the word 'instructions' look for its meaning in the computer dictionary and finally replacethe word with new meaning from the dictionary (3mks)

(iii). Format the whole paragraph to justified alignment shading colour light green (3mks)

2.

NAME	BASIC PAY	DEPARTMENT	AGE	STATUS
Peter	15000	Computer	34	Single
John	17000	Computer	44	Married
Kamau	19000	Finance	33	Divorced
Charles	21000	Research	33	Single
Johns	23000	Research	25	Single
Thomas	25000	Computer	26	Married
Ann	27000	Finance	28	Married
Susan	29000	Finance	29	Divorced
Tina	31000	Research	24	Divorced
Andrew	33000	Computer	40	Single
Hardy	35000	Finance	20	Married
Njeri	37000	Finance	43	Single
Kimani	10000	Research	15	Single
Silamtoi	15000	Finance	35	Divorced
Tina	35000	Computer	25	Married
Moses	59000	Research	33	Single
Miriam	70000	Finance	56	Divorced
Maurice	32876	Computer	70	Divorced
Alphie	43876	Research	98	Divorced
Albert	48098	Research.	32	Single
Langat	6500	Computer	12	Single
Phenny	29000	Finance	70	Single
Hilda	32000	Computer	13	Married

Create data base called personnel and create a table named department (5 mks)

(b) Create queries to determine (save each query using the alphabet numbers below)

i. Number of people with basic salary greater than 32,000=
(5 mks)

ii. Number of people with basic salary less than 45,000= AND come from computerdepartment(5mks)

iii. Names of people who are either married or single.
(4 mks)

iv. Those whose salary fall between 25,000/= and 50,000= (3mks)

v. Those whose name begin with letter M or end in letter S (3 mks)

(c) (i) Create a query to compute the new salary if there is an increment of basic pay by 50% (7mks)

(ii) Filter using query those who earn above 33000/= and aged between 39 and 70
(5 mks)

(d) (i) Create a form using form wizard using the Departmental table above.
(3mks)

(ii) Create a form in design view using the departmental table above on the form calculate the total basic

salary for the whole table, add current date and time on the form header (5 mks)

(iii) Create a report for THE ABOVE table using design view and print. (5mks)

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Kenya Certificate of Secondary Education (K.C.S.E)

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COMPUTER STUDIES

PAPER 2

(PRACTICAL)

TIME: 2HOURS

INSTRUCTIONS TO CANDIDATES

) This paper has **two** questions.

a) Answer all the **questions.**

b) All questions carry equal **marks.**

c) Type your name and index number at the right hand corner of each print out.

d) Write your name and index number on the storage medium provided.

e) Write your name and version of software used for each question attempted.

f) Passwords **should not** be used while saving in your work.

g) Make a printout of the answers on the answer sheets provided

h) Hand all the **print outs** and the **storage medium**

i) This paper consists of **4** printed pages

j) Candidates should check to ensure that all pages are printed as indicated and no questions are missing.

1. a) Kipto'smilling company limited has given you the details below to be used in calculating expenses incurred during two quarters of the year as indicated. Use a spreadsheet package to enter the details, and save your work as Expenses 1.

(10 marks)

	A	B	C	D	E	F	G
1	**KIPTO'S MILLING COMPANY LIMITED**						
2	**P.O BOX 625 NAKURU**						
3		**First quarter**			**Second quarter**		
4		**January**	**February**	**March**	**April**	**May**	**June**
5	Production cost	15642	14687	18741	19457	15412	15441
6	Transportation	1564	1469	1874	1946	1541	1544
7	Warehousing	1125	1056	1347	1398	1107	1109
8	Promotion	2564	2407	3071	3188	2525	2530
9	Salary	4525	4248	5420	5626	4456	4465

b) i) Copy the details of Kipto's milling company limited to sheet 2 of your worksheet.

(2marks)

ii) Add a column called "Total" and calculate the Total production cost of the two Quarters.

(4marks)

iii) Use relative referencing to calculate the total for the other expenses.

(4marks)

c) i) Calculate the total expenses for each month so as to give the results as "Total expenses" on row 10.

(4marks)

ii) On the paper provided, write the formula used to calculate the expenses for the month of April.

(2marks)

d) i) Use absolute referencing to calculate the cumulative total expenses for the two quarters in cell H10.

(4marks)

ii) Write the formula used to get the cumulative total on the paper provided.

(2marks)

iii) Calculate the percentage of total expenses of the respective months and display the results on row 11 as "percentage of total expenses".

(4marks)

iv) Write the formulae used to get the percentage of May.

(2marks)

v) Draw a line graph to illustrate the percentage of the total expenses for the six months indicating the months. Save your work as Expenses 2.

(10 marks)

vi) Print Expenses 1 and Expenses 2.

(2marks)

2. a) A hospital uses a database to maintain data about its employees.

Createa database file named**EMPLOYEE**.

(1 mark)

b) Create a table called **EMPLOYEE 1** with the following fields and hence enter data into it as shownin fig 1 below. NB: Choose an appropriate primary key.

(14marks)

3. EMP NO
4. NAME
5. DATE OF BIRTH
6. DEPARTMENT
7. BASIC PAY

Fig 1

Emp	Name	Date of birth	Department	Gross pay
01	John Kirui	16/2/1972	Computer	28000
02	Margaret Wairimu	2/2/1960	Medical	30000
03	Jane Cherono	2/5/1970	Management	15000
04	Victor Oduor	8/12/1981	Accounts	25000
05	Harry Wanyama	23/6/1983	Medical	30000
06	Jacob Kiprono	19/4/1973	Management	45000
07	Ali Mohammed	1/1/1969	Medical	30000
08	Daniel Omondi	3/5/1983	Accounts	25000
09	EverlyneKitune	11/3/1971	Medical	20000
10	Nancy Kerubo	22/9/1980	Medical	20000

c) i) Insert **two** new fields to hold the employee's profession and deductions.

(4 marks)

ii) Data for included fields is as follows;

Profession

Mohammed, Wanyama and Wairimu are Doctors. Oduor and Omondi are accountants. Kiprono isan Administrator, Kirui is a systems analyst and Cherono is a secretary.

Deductions

Emp no	Amount
07, 05, 02	8,000
04, 08	7,500
06	10,000
01	12,000
03	3,500
09, 10	4,000

Enter the above data into the respective fields.

(6 marks)

iii) Sort the records in ascending order based on the name field and save as EMPLOYEE 2.

(3marks)

d) i) From EMPLOYEE 2, extract a list of employees who were born between 1960 and 1972 both years inclusive and are accountants, nurses or doctors. Write down on paper provided the query expression you used to extract the data. Save the extracted list as LIST1. (8marks)

ii) Remove the date and occupation criteria on LIST 1. Add a calculated field to calculate the Net pay of all employees as Gross Pay - Deductions. Save as LIST 2. (5marks)

e) Generate a columnar report based on LIST 2 with the following fields; Emp no, Name, Department and Net Pay. Sum up the Net Pay for all employees in the report. Save your report as REPORT.

(6marks)

f) Print **EMPLOYEE1, EMPLOYEE2, LIST1, LIST 2** and **REPORT**.

(3marks)

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SERIES 5 2024 KCSE MOCK

INSTRUCTIONS TO CANDIDATES:

1. Type your name and index number at the top right hand corner of each printout.

2. Write your name and index number on the CD.

3. Write the name and version of the software used for each question in the answer sheet.

4. Passwords **should not be used** while saving in the

5. Answer all questions. All questions carry equal marks.

6. Hand in all the **printouts** and the **CD.**

This paper consists of 7 printed pages.

Candidates should check the question paper to ensure that all

pages are printed as indicated and no questions are missing

QUESTION 1: SPREADSHEETS

8. The following are the KCSE results for a certain school in Nyeri. Enter the data as it is in Excel and answer the question that follows.

KIMAKANIA HIGH SCHOOL NYERI													
NAME	Eng	Kis	Mat	Bio	Phy	Chem	Hist	Art	Comp	Bst	Ave. point mark	Overall grade	Rank
THIRU	B+	B	A	B-	A	B	B-	A-					
KIPTOO	A-	B+	A	A-	A	A-	A-			A			
COLLINS	B+	B	A	B+	A	B	B	A					
RONALD	B+	A	A	A-	A	B+	B+		A				
FREDRICK	A	A	A	B	A	A-	A-		B+				
NJEGE	B+	B+	A	A-	A	B+	B+		A				
MUARINE	A	B	A	A	A	A-	A-			B-			
KIBET	B	A-	A	A	A	A	A			A			
WAFULA	B	B	A	B+	A	B-	B-			A			
NDIRANGU	B+	A-	A	B	A	B	B			A			
OTIENO	B+	C	A	A-	A	A-	A-			A			

MATU	B	A-	A	B+	A	B+	B+		A				
KIBUTHA	B	B	A-	B+	A-	B+	B+		A				
KIRURI	A	B+	A	A	A	A-	A-		A				
AMING'A	B	A	A	A-	A	A-	A-			C+			
JACKSON	B+	C+	A	B+	A	A	A		B-				
MUMBI	A-	A-	A-	B+	B+	B+	B+		A				
KIGUTA	B+	A	A	A	A	A-	A-		A				
MWANGI	B	A-	A	B+	A-	A-	A-	A-					
WAMUCIE	B+	B	A	A-	A	A-	A-	A					
MBUGUA	B+	B-	A	B	A-	B-	B-	A					
OGEGA	B-	A-	A-	B-	B+	B	B	C					
HENRY	A-	A-	A	A	A	A	A		D+				
ABDI	A	B+	A	B+	A	A	A		A				
JAMES	B+	C-	A-	B+	A	A	A			B+			

a) Save your work as **Matokeo_Mufti**. [15 Marks]

b) Perform the following calculation for these columns and write down the formulas you used in the spaces provided below each question:

i) Use a formula to get the average point mark in the table above given that,

[3 Marks]

Average Point Mark = Average of (sum of point of all subjects)

GRADE	POINTS
A	12
A	11
B+	10
B	9
B-	8
C+	7

ii) Determine each student's rank using the Ave. Point Mark.

[3 Marks]

iii) Use a formula to evaluate the Overall grade using the Ave. Point Mark, given that:

[3 Marks]

GRADE	MARKS
A	90-100
A-	81-89
B+	71-80
B	61-70
B-	51-60
C+	41-50
C	36-40
C-	31-35
D	[illegible]

c. Add in the following table in the same sheet: [5 Marks]

	A	A-	B+	B	B-	C+	C	C-	D+	Number of Students	Max Grade Number	Min Grade Number	Average Mark	Average Grade	Rank	% Above Pass Mark
ENG																
KIS																
MAT																
BIO																
PHY																
CHEM																
HIST																
ART																
BST																
COMP																
Overall Grade																

d. **Calculate the following**:

(**NB//** Write the formulas used in the space provided below each question)

iii) **'Number of students'** per grade for each subject, e.g. 10 students got an A in History. [3 Marks]

iv) **'Number of students'** column with the number of students who do the specific subject.
[1 mark]

iii) **'Max Grade Number'** (=the grade with the highest number of students in that subject.)

[1 mark]

iv) 'Min Grade Number' (= the grade with the lowest number of students in that subject.)

[1 mark]

v) 'A subject's Average Mark' = Sum of values for each grade divided by total number of students in that subject (Use the Grade-Value conversion table given in **Qn, 2a)(i)**

[2 Marks]

vi) Average Grade of the Average Mark using the conversion table in **Qn. 2 b(ii) above.**

[2 marks]

vii) Rank of each subject as per its average mark use the conversion table **Qn, 2a)(i) &(iii)**
[4 Marks]

viii) A subject's '% Above pass mark' = Percentage of students who had B- or above in that subject.
[4 Marks]

d) Plot a bar graph of the Subjects against their Average Mark [4 Marks]

e) Put a footnote with your ***name and index number*** in the same sheet and print your work.

[2 Marks]

f) Print the work book [2 Marks]

QUESTION 2: DATABASES

9. Ogeke is the manager of a college's ICT department. He has been told to use Database Management System (DBMS) to update records for a fundraising data. Perform the following operations just like Ogeke would:

k) i) Create a **relational database** with four table; Class List, Family Details, Pledge Contributions and Walk Form Contributions. [4 Marks]

ii) Class List contains the following fields; Class no, first Name, surname. Family Details contains Family Id, Parents Name, Address, City and Class no. Pledge Contributions contains Pledge Id, family Id, Amount Pledged and Amount received. Walk Form contribution contains Walk Id, Class no, Walker Name, Amount Promised and Amount Paid.

iii) Save your database as **Mchango_01** [2 Marks]

b) Input the following Data into Mchango_01 [11 Marks]

CLASS LIST

CLASS NO	FIRST NAME	SURNAME
1	JACOB	MAUNDA
2	JAMES	MAMBO
3	MIKE	OGEKE
4	KEVIN	MALEWA
5	ALI	ABDI
6	PHARELL	OGEGA
7	RICHARD	MOKAYA
8	DENNIS	KIBET
9	JOHN	OTIENO

FAMILY DETAILS

FAMILY ID	PARENTS NAME	ADDRESS	CITY	CLASS NO
1	PROF & DR MAUNDA	89722	KISUMU	8
2	DR & MAMBO	55554	NAIROBI	21
3	MR & MRS OGEKE	6935	NYAMIRA	5
4	MR & MRS MALEWA	54897	NAIROBI	1
5	MR & MRS ABDI	12548	WAJIR	2
6	MR & MRS OGEGA	548	NAKURU	3
7	MR & MRS MOKAYA	1254	KISUMU	4
8	MR & MRS KIBET	5778	NAIROBI	6
9	MR & MRS OTIENO	3124	KISUMU	9
10	MR & MRS KOBIA	5546	NAIROBI	10
11	MR & MRS MATASIA	44977	NAKURU	11

10	WILSON	KOBIA
11	JOHN	MATASIA
12	MOHAMED	ALI
13	JANET	WAMBUI
14	GERALD	KOECH
15	ANDREW	NGUGI
16	MICHAEL	GICHANGA
17	PETER	NG'ANG'A
18	CHRIS	SONKO
19	BENSUNDA	OWINO
20	FRANCO	WAFULA
21	KILLY	WAGAIYU
22	TONY	WAIGANJO

PLEDGE CONTRIBUTIONS

PLEDGE ID	AMOUNT PLEDGED	AMOUNT RECEIVED	FAMILY ID
1	10000	8000	1
2	25600	25600	22
3	7800	6000	2
4	23690	0	3
5	6587	2300	4
6	3690	3560	7
7	5000	500	21
8	2478	1000	19
9	0	0	20
10	35697	0	15
11	2569	2569	12

WALKER FORM CONTRIBUTIONS

WALK ID	WALKER NAME	AMOUNT PROMISED	AMOUNT PAID	CLASS NO
1	GIKONGE	5000	3000	1
2	MORAA	2580	0	10
3	KERUBO	500	6000	16
4	JAMES	20	15	6
5	NJUKI	5980	2300	14
6	SABINA	6300	3560	7
7	JOHN	100	100	22
8	KALVIN	689	0	18
9	KOECH	8595	700	15
10	OTIENO	3695	300	5
11	ABDI	10000	10000	17

i) Create a query that contains the *Parents Name* and the *students' first name* who have '**Promised'** more than **7000**. Save the query as **Promised_Mchango**. [5 Marks]

ii) Make a query and from it produce a report that list the student name and parents names of families who's **Amount Pledged** is equal to **Amount Received** and greater than 0. Save the query as **Received**Q and the Report as **Pledged_Received**. [10 Marks]

iii) Make a query from it to produce a report that calculates the difference between pledge and amount received from each family. Save the query as **Balance** and the Report as **Bal_report**.

[10 Marks]

iv). Create **4 Reports** that can be used to display the *4 tables separately* in the database**.**

Save them as ***PC, WFC, Class_list and Family_Details respectively*** **print these reports**

[4 Marks]

v) Create **four forms** of each table above and save them as respective table names. [4 marks]

THIS IS THE LAST PRINTED PAGE

NAME……ADM……

SCHOOL……INDEX……

DATE……SIGN……TARGET……

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SERIES 6 2024 KCSE MOCK

INSTRUCTIONS TO CANDIDATES

1. *Write your name and index number at the top right hand corner of each print out.*
2. *Write your name and index number on the diskette.*
3. *Write the name and the version of the software used for each question attempted in the answer sheet.*
4. *Answer **ALL** the questions.*
5. *All questions carry equal marks.*
6. *Passwords **should NOT be used** while saving in the diskette.*
7. *All answers **MUST BE** saved in your diskette.*
8. *Make a print out of the answers on the answer sheets provided.*
9. *Arrange your printouts and tie/staple them together and use the best fit i.e. landscape or portrait for your printouts.*
10. *Hand in a folder with your name.*

1. (a) Using a Word Processing package, type the congratulatory note below as it appears and save it as CONGRATS.

(15mks)

MAGS Software Co. Ltd
P.O. Box 5678
Kericho
(Insert today's date)

<<First Name>><<Last Name>>
<<Address>>
Dear**<<First Name>>**

RE: CONGRATULATIONS

Due to your hard work and sacrifices you made this year, the company wishes to congratulate you for emerging the best in our internal interview that you applied for. Your new position will be **<<Position>>** and your new salary scale will be**<<Amount>>.**

Yours faithfully,

Gregory Bruce
PERSONNEL

10. Create a data source with the following details and use it with the note you have
just typed to generate personal notes to the company's named personnel. Save it as Details. (15mks)

George Kinoti	Wilberforce Kenya	Henry Odongo
P. O. BOX 5678	P. O. BOX 5678	P. O. BOX 5678
Kericho	Kisumu	Kilgoris
Software Developer	ICT Officer	Database Admin
Ksh.125000	Ksh.125000	Ksh.125000

Grace Akinyi	Beth Mugo	SharonWangoi
P.O. BOX 5678	P. O. BOX 5678	P. O. BOX 5678
Nakuru	Migori	Nandi-Hills
System Admin	Secretary	Accountant
Ksh.120000	Shs.30000	Shs.45000

11. Insert data fields in main document and generate the notes for the employees.(14mks)

(d) Print the notes.
(6mks)

2. (a) Create a database called **SCHOOL**.
(2 Marks)
(b) Create three tables **EXAMINATION**, **DOS** and **BOARDING**with the fields as shown below.
(10Marks)
(c). Create a relationship between the three tables and enforce integrity.
(6Marks)
(d). Enter the data items in the given tables three tables.

(15Marks)

EXAMINATIONS

Admission Number	Mathematics	English	Kiswahili	Biology
1	45	67	90	23
10	45	89	90	20
2	45	70	80	45
3	89	90	90	20
4	78	9	90	50
5	67	89	60	90
6	67	90	7	80
7	34	78	70	90
8	23	50	38	90
9	23	15	67	20

DOS

Admission Number	SName	Other Names	KCPEMark	Year of KCPE
1	PETER	BARASA	327	2007
10	JOHNSON	SUK	250	2001
2	ALEX	OJWANG’	340	1998
3	BELINDA	ESTHER	250	2008
4	BRAMWEL	RAYMOND	450	2007
5	ALEX	WAMWANA	410	2003
6	JANET	KILONZO	400	2000
7	MATHEW	KARIUKI	450	1999
8	NASIMIYU	CATHEEN	290	2003
9	KIMATHI	JOHN	3000	2001

BOARDING

Admission Number	UNIFORM	TOOL	TOOL NAME
1	No	12	JEMBE
10	Yes	20	JEMBE
2	No	11	PANGA
3	Yes	1	SLASHER
4	Yes	111	JEMBE
5	No	15	RAKE
6	Yes	22	BASIN
7	Yes	11	BROOMS
8	Yes	90	RAKE
9	Yes	23	BUCKET

(e) Design a query that would display the following fields as shown below and write down the formulae for getting the total score and criteria for extracting the records below
(10 Marks)

ADMIN

Admission Number	UNIFORM	SName	KCPEMark	Mathematics	English	Kiswahili	TOTAL SCORE
1	Yes	BELINDA	250	89	90	90	269
10	Yes	BRAMWEL	450	78	9	90	177
2	Yes	JANET	400	67	90	7	164

(f) Design a report that would sort the following in ascending order in the order of the following fields, Total score, KCPE Score, SName the Admission Number and the report should display all the fields. Save the report as administration

(5Marks)

(g) Print, administration and admin (2Marks**)**

NAME……ADM……

SCHOOL……INDEX……

DATE……SIGN……TARGET……

451/2

SERIES 7 2024 KCSE MOCK

INSTRUCTIONS TO CANDIDATES

12. *Write your name and Admission number in the spaces provided above*
13. ***Password**s should not be used while saving in the **Compact disk**.*
14. *Answer all questions.*
15. *Make a **print out** on the answer sheet provided*
16. *Hand all the **print outs** and the **Compact disk**.*

FOR EXAMINER'S USE ONLY

QUESTION	MAX. MARKS	CANDIDATE'S SCORE
1	50	
2	50	
TOTAL SCORE		

This paper consists of 4 printed pages. Candidates should check to ensure that all pages are printed as indicated and that no questions are missing.

l) The data in the tables below were extracted from SuperStar football league management system.

Table 1: TEAMS TABLE

Team Code	Team Name	Address	Tel No.	Reg Fee
01	Maji Mazuri High	Box 0012	021542148	5000
02	Sunshine School	Box 2454	025485267	3500
03	Kabarak High	Box 458	025478756	4700
04	Sacho High	Box 635	032547855	2400
05	Marigat School	Box 2446	032458754	1200
06	Nakuru High	Box 6589	015487564	1400
07	Baringo High	Box 1254	031204543	5000

Table 2: RESULTS TABLE

Team Code	Games Won	Games Lost	Games Draw
01	12	2	2
02	10	3	3
03	4	8	3
04	9	3	4
05	7	3	5
06	7	6	4
07	5	9	2

(h) Create a database named "SUPERSTAR" to store the data above (12 marks)

(i) Format the *Reg Fee* field as follows:

i) To display the entries with the prefix: "KSh." correct to two decimal places (2 marks)

ii) Restrict entries to positive values only and should return an error message "*Error: enter positive values only*" if an out of range value is entered.

(2 marks)

(j) Validate Team Code to 2 characters only (2 marks)

(k) Create a suitable table relationship between the tables (3 marks)

(l) Design a form for each table and use it to enter the data into the tables (9 marks)

(m) i) Create a query named **TotalGamesQuery** to display the fields: Team Code, Team Name and Total games played.

(4 marks)

ii) Create a query to show the team name and total points. (**Note: A Win in a game earns a team 3 points, a draw 1 point and a loss 0**). The query should show the 3 best teams based on the total points. Save the query as **BestTeamsQuery**.

(5 marks)

(n) i) Create a report named **RegReport** to display the Team name, Address, Reg Fee. The report should show the total registration fee collected from all teams.

(5 marks)

ii) Sort the records to show the team that has paid the highest amount of registration fee first.

(2 marks)

ii) Title the report as "*Income from registration*" (2 marks)

(o) Print each of the following: (2 marks)

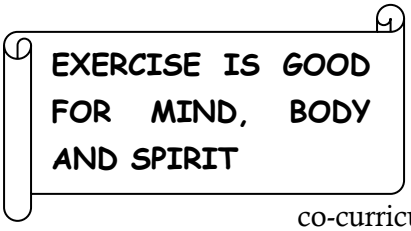
i) Teams table and Results table

ii) TotalGames Query and BestTeamsQuery

iii) RegReport

m) a) Open a word processing program and create the document below exactly as it appears. (30 marks)

BENEFITS OF CO-CURRICULAR ACTIVITIES IN LEARNING INSTITUTIONS



When co-curricular activities such as sports, drama, clubs, music etc. are integrated in the curriculum, they help learners acquire balanced growth. The following are some of the reasons why students should be encouraged to participate in co-curricular activities while in learning institutions.

Co-curricular activities encourage collaboration and help achieve goals

Aggressively going for a common goal with team mates and a team manager, teaches one how to shape a collective synergy and effectively communicate the best way to solve problems *en route* to victory. This will be very helpful when one encounters problems at place of work or at home.

Co-curricular activities boost self esteem

Realising that hard work pays off brings about self –confidence. Competing and winning in a co curricular activity inspires one to achieve in any other goal set. This is very exciting and rewarding.

Co curricular activities augment academic work.

Engaging in co curricular activities requires a lot of time and energy. Sports, drama and Music require skills of memorization, repetition and learning which are directly relevant to class work.

For all these reasons, it is always a great decision to get involved in co-curricular activities.

CO CURRICULAR ACTIVITIES SCHEDULE FOR THE YEAR

<table>
<tr><th></th><th colspan="2">TERM 1</th><th colspan="2">TERM 2</th><th>TERM 3</th></tr>
<tr><td>Primary Schools</td><td colspan="2">Football</td><td rowspan="2">Athletics</td><td rowspan="4">Music Festivals</td><td></td></tr>
<tr><td>Secondary Schools</td><td>Indoor games</td><td>Football</td><td>School-based activities</td></tr>
<tr><td>Technical colleges</td><td rowspan="2">Swimming</td><td>Indoor Games</td><td>Rugby</td><td>Indoor games</td></tr>
<tr><td>Universities</td><td colspan="2">Football</td><td>Motor Sports</td></tr>
</table>

b) Save the document created in (a) above as **cocurricular** in your folder (2 marks)

c) Insert the text "Co curricular Department Resources" as footer. Apply italics to the footer and align it to the centre. (2 marks)

d) Insert a section break at the end of the document created such that the new section starts on a new page.
(1 mark)

e) i) Insert a pie chart in the new section to represent the information shown in the following table: (5 marks)

	Total Annual Budget
Primary Schools	20
Secondary Schools	10
Technical Colleges	15
Universities	5

ii) Apply a grey background to the chart area created in (i) above (2 marks)

iii) Insert a caption "The Annual projected cost of organising co curricular activities (Ksh. 000,000)" (2 marks)

iv) Change the orientation of the page containing the chart to landscape (2 marks)

f) Insert page numbers at the top right hand corner of the document (2 marks)

g) Save the document and print it on both sides of the paper (2 marks)

NAME……ADM……

SCHOOL……INDEX……

DATE……SIGN……TARGET……..

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SERIES 8 2024 KCSE MOCK

COMPUTER STUDIES
451/2
PAPER 2
(PRACTICAL)
TIME: 2 ½ HRS
2022

INSTRUCTIONS TO CANDIDATES

17. Indicate your name and index number at the top right corner of each printout.
18. Write your name and index number on the CD / Removable storage medium provided
19. Write the name and version of software used for each question attempted in the answer sheet provided.
20. Answer all the questions
21. All questions carry equal marks
22. Passwords should not be used while saving in the CD/Removable storage medium.
23. All answers must be saved in your CD/Removable storage medium used.
24. Make a printout of the answers on the answer sheet.
25. Arrange your printouts and tie / staple them together.
26. Hand in all the printouts and the CD/Removable storage medium used
27. **This paper consist of 4 printed pages**
28. **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
29. **Candidates should answer the questions in English**

QUESTION ONE

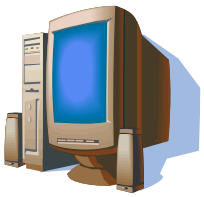
n) Type the document below as it appears using a word processing package and save it as Article (30 mks)

INTRODUCTION TO COMPUTING

What makes human being different from animals is the ability to invent tools. Tools assisted man in building shelters, making clothes and hunting food.
Machines were then invented to help the thinking skills of man. It started with adding machines, computers then came calculators. Now computers help the thinking skills of a man.
Computers have undoubtedly come to stay. They are part of our day to day lives.
Infact, it is not possible to escape contact with computers. We use the term "computer" quite easily let us see what the definition of the term "Computer" is.

A COMPUTER

A computer is a high-speed electronic device capable performing arithmetic and logical operations and of sorting and executing a set of instructions which will enable it to perform a series of such operations without manual interventions.
Thirty years ago computers
Were huge machines, they were very costly, only companies and Government Organizations could afford the luxury of using computers. In the last ten years the microprocessor revolution changed the entire world of computers.
Computers of any capacities are available now.



From super computers to micro computers there is a wide variety of computers available today. Now personal computers are available at affordable prices.

CLASSIFICATION OF COMPUTERS		
Computer	Physical size	Super computers
		Mainframe computers
		Mini computers
		Micro computers
	Purpose	Special purpose
		General purpose
	Function	Analog computers
		Digital computers
		Hybrid computers

o) Format the headings, bold, font type Times New Roman, size 14, double underline and Centre alignment (4mks)
p) Put a **header** and footer**.** The footer should read "News letter you can rely on" while header should read ":Vision update" (2mks)

q) Insert page numbers N of M on the footer and should be at the right bottom of the document. (2mks)
r) Search for the word computer throughout the Article and replace with "PC" (2mks)
s) Spell check the document (1 mk)
t) Change the first paragraph to double line spacing (2mks)
u) Apply a character space expanded, 30 points to the headline computer. (2mks)
v) Insert a caption for the graphic in the article and name it computer. Place the caption below the graphic (2mks)
w) Save the entire document as Article 1 (1 mk)
x) Print the document Article 1 and Article (2mks)

Question two

The following data was extracted from the IEBC registration book. Use it to answer the questions given.

(p) Enter the data shown below in a spreadsheet and save it as Election 2022 (10 mks)

	A	B	C	D	E	F	G	H
1	IEBC II DATA AS AT 6TH FEB 2022							
2	REGISTRATION OF VOTERS PER CONSTITUENCY							
3	County	Const Code	Constituency Name	2nd Registration	Voters Transferred	Total Registered	Updated Registration	
4	Kajiado	183	Kajiado North	3510	380			
5	Kajiado	184	Kajiado Central	3454	611			
6	Kajiado	185	Kajiado East	4368	1233			
7	Kericho	188	Kipkelion East	2666	518			
8	Kericho	189	Kipkelion West	5761	4534			
9	Kericho	190	Ainamoi	3575	3169			
10	Bomet	195	Chapalungu	4023	1030			
11	Bomet	196	Bomet East	3327	407			
12	Bomet	197	Bomet Central	1977	584			
13	Kakamega	204	Mumias West	4797	1182			
14	Kakamega	205	Mumias East	4495	849			
15	Kakamega	206	Matungu	4093	1080			
16	Vihiga	212	Sabatia	2714	44			
17	Vihiga	213	Hamisi	4259	1523			
18	Vihiga	214	Luanda	2220	0			
19								
20								
21								

(q) Rename the sheet as Registration (1 mk)
(r) Copy the work into sheet 2 and rename it as Registration1 (1 mk)
(s) Sort the worksheet in ascending order of their county (1 mk)
(t) Get the totals of voters 2nd registration for each county (3 mks)
(u) Copy details on registration sheet and paste it in sheet three. Rename it as registration2 (1 mk)
(v) Given that the 1ST Registration was less than the 2nd Registration in all constituency by 12%:

- Enter the label % increment in cell A20 and the value 12 in B20. (1 mk)
- Insert a column between constituency name and 2nd registration and label it first registration. Use absolute cell reference to calculate the 1st Registration. (4 mks)
- Get the totals for the 1st Registration and the 2nd Registration in cell F4. Copy the formula to the rest of the cells. (2 mks)
- Some voters transferred from their stations to new stations. Using the total registered column and the voters transferred column. Calculate the new values in cell G4. Copy the formula down to other cells. (3 mks)

(w) Using the total registered column, determine

- The lowest registered voters in cell G21 (2 mks)
- The average number for all registered voters in all constituencies in cell H19 (Use updated registration column) (2 mks)

(x) Create a column graph on a new sheet. Name it votes. That compares the constituency name against 1st Registration and 2Nd Registration. Label the following (7 mks)

1. Chart title VOTER REGISTRATION 2022
2. X – Axis: constituency name
3. Y – Axis: Registered voters
4. Legend Right

(y) Print registration and votes (graphs) sheets (2 mks)

NAME……ADM……

SCHOOL……INDEX……

DATE……SIGN……TARGET……

451/2

SERIES 9 2024 KCSE MOCK

451/2 : COMPUTER
Paper 2
(PRACTICAL)
2½ hours

INSTRUCTIONS TO THE CANDIDATES

11. Indicate your name and index number at the top right hand corner of the printout.
12. Write your name and index number on the CD/removable storage medium provided.
13. Write the name and version of the software used for each question attempted.
14. This paper consists of two questions each having **50** marks.
15. Answer **all** the questions **Passwords should not be** used while saving files.
16. All files created must be saved in the provided CD/removable storage medium.
17. Make printouts of your answers on the answer sheet provided.
18. Hand in all the printouts and the Cd/Removable storage medium used.
19. This paper consists of 6 printed pages.
20. Students should check the question paper to ascertain that all the pages are printed as indicated and no question is missing.
21. Candidates should answer the questions in English.

v) The following table contains data extracted from an employees' payroll file maintained by a certain company.

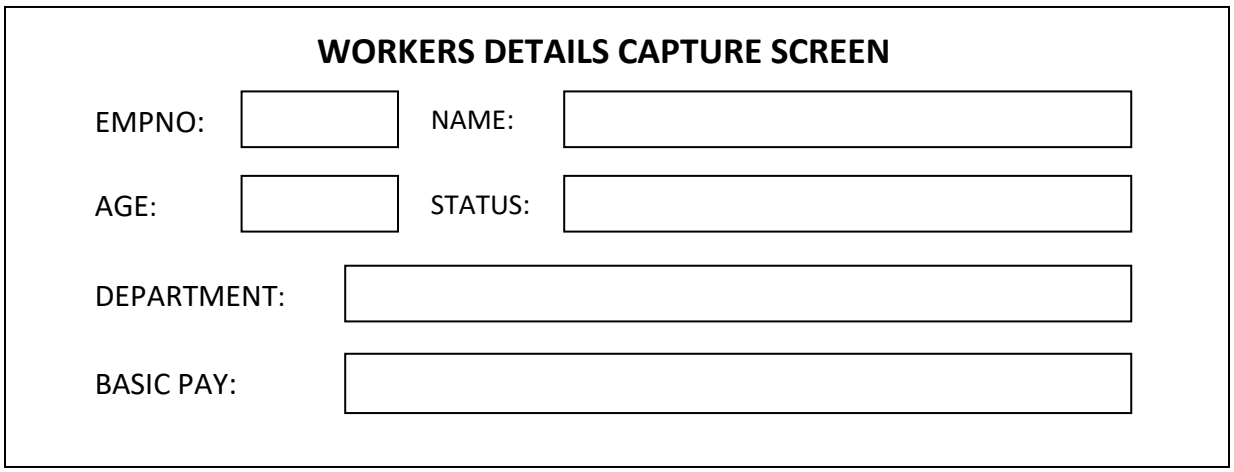
EMPNO	NAME	BASIC PAY	DEPARTMENT	AGE	STATUS
E100	Marren	16000.00	Computer	34	Single
E101	Wezo	17000.00	Computer	44	Married
E102	Dave	19000.00	Finance	33	Divorced
E103	Charles	21000.00	Research	33	Single
E104	Davy	23000.00	Research	25	Single
E105	Thomas	25000.00	Computer	26	Married
E106	Ann	27000.00	Finance	28	Married
E107	Susan	29000.00	Finance	29	Divorced
E108	Tina	31000.00	Research	24	Divorced
E109	Andrew	33000.00	Computer	40	Single
E110	Hardy	35000.00	Finance	20	Married
E111	Selly	37000.00	Finance	43	Single
E112	Kimani	10000.00	Research	15	Single
E113	Chep	15000.00	Finance	35	Divorced
E114	Eddie	35000.00	Computer	25	Married
E115	Moses	59000.00	Research	33	Single
E116	Miriam	70000.00	Finance	56	Divorced
E117	Maurice	32876.00	Computer	70	Divorced
E118	Alphine	43876.00	Research	65	Divorced
E119	Cazy	48098.00	Research	32	Single
E120	Langat	6500.00	Computer	12	Single
E121	Phenny	29000.00	Finance	70	Single
E122	Hilda	32000.00	Computer	13	Married

(a) (i) Create a database file and save as **Company.** **[1 Mark]**

(ii) Create a table named **Workers** containing the fields shown in the table above**.** **[3½ marks]**

(iii) Choose and set an appropriate field as a primary key. [**½ mark]**

(b) (i) Create a form named **WorkersForm** to be used to enter the data above in the **Workers**table to appear as shown below. **[7 Marks]**



(ii) Use the **WorkersForm** to enter the data above into the **Workers** table**.[5 Marks]**

(c) Create queries to determine:

30. number of people with basic salary greater than 32,000/= .Save the query as **Basic** **[3 Marks]**
31. number of people with basic salary less than 45,000/= and come from computer department. Save the query as C**omputer.** **[5 Marks]**
32. Those whose name begin with letter 'M' or end in letter 'S'. Save the query as **Names** **[3 Marks]**

(d) (i) Create a query to determine those employees who will earn more than 50,000/= if there is an increment of basic pay by 10%. Save the query as **SalaryIncrement. [4 Marks]**

(ii) Create a query to determine the year of birth of each employee from the current year. Save as **YearOfBirth**. **[3 Marks]**

(e) (i) Create a report from **Workers**table to display all the data in the table. Save as **WorkersReport**. **[3 Marks]**

(ii)Modify the **WorkersReport** in (e)(i) above as follows:

I. Add the "**EMPLOYEE SALARY DETAILS"**as the report title. Use font size 19 pts, bold, underline and centre it across the columns containing data. **[3 Marks]**
II. Display the employees records according to their department and show the total amount the company spend on each department as salary and the total amount spend on paying all the employees. Save as **WorkersReport_2**. **[6 Marks]**

(f) Print: **[3 Marks]**

y) Workers table;
z) YearOfBirth query;
aa) WorkersReport_2.

2. The following data was extracted from Applicants' file of HITECH COMPUTER COLLEGE. Enter the data as it appears in a spreadsheet.

	A	B	C	D	E	F	G	H	I
1	NAME	ADDRESS	TOWN	ENG	KISW	MATH	MEAN	POSITION	REMARK
2	ALMA N.	400	Nairobi	40	60	60			
3	Otieno G.	3201	Kisumu	55	50	40			
4	Nyambane T.	5600	Kisii	70	60	50			
5	Simiyu S.	1236	Bungoma	30	80	70			
6	Staicy C.	48	Eldoret	75	70	80			
7	Akora A.	6032	Mombasa	40	30	50			
8	Natasha J.	8021	Nyeri	50	40	55			
9	Amoit C.	2	Busia	80	50	70			

5. (i) Insert two blank rows at the top of the worksheet. **[1 Mark]**
   (ii) Enter the following title and subtitle in the blank rows respectively; HITECH COMPUTER COLLEGE and APPLICANTS FILE. **[1 Mark]**
   (iii) Centre the title and subtitle across the columns that contain data. **[2 Marks]**
6. Using functions, compute:
   (i) the mean for each student and format it to zero decimal place. **[3 Marks]**
   (ii) the position of each student. **[2 Marks]**
   (iii) the highest score for each subject. **[2 Marks]**
7. The college wishes to analyze the applicants' data in order to find those applicants who qualify for admission to pursue a course in IT. Successful candidates MUST meet the following minimum requirements;
   a. Must have scored a mean of 45 marks and above;
   b. Must have scored 60 marks and above in Mathematics;
   c. Must have scored 50 marks and above in either English or Kiswahili.

   Enter an appropriate function in cell I4 and copy it to other cells to determine whether the student qualifies for admission. If the student qualifies, the function should display 'Successful'. Otherwise it should display 'Unsuccessful'. **[7 Marks]**
8. Create a function to find the number of applicants who are successful. **[2 Marks]**
9. Copy the entire worksheet to sheet 2 and rename it as Successful Applicants. **[3 Marks]**
10. Filter the 'Successful Applicants' sheet to display the records of those applicants who are successful. **[3 Marks]**

11. The college wishes to send admission letters to the successful applicants. Using a Word processor, type the following letter as it appears and save it as **Admission letter1**.**[8 Marks]**

    (Type today's date here)
    <<NAME>>
    <<ADDRESS>>
    <<TOWN>>

    Dear <<NAME>>,
    RE: INVITATION TO PURSUE A COURSE IN IT
    We are pleased to inform you that your application to pursue an IT course has been successful.

    You are required to report on 2nd January 2010 at 8.00 am. Other details will be given to you on your reporting day.

    Yours faithfully,

    Doglas Mayaka
    CHIEF PRINCIPAL

12. Merge the admission letter in (g) above with the 'Successful Applicants' Sheet you created in a spread sheet to generate personalized letters to the successful applicants. Save as **Admission letter2**. **[12 Marks]**

13. Print: **[4 Marks]**
    (z) Sheet1;
    (aa) Successful Applicants Sheet;
    (bb) Admission letter1;
    (cc) *any one* successful applicant's admission letter in Admission letter2.

NAME……ADM……

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SERIES 10 2024 KCSE MOCK

INSTRUCTIONS TO CANDIDATES

1. *Type your name and admission number at the top right hand corner of each printout*
2. *Sign and write the date of the examination below the name and index number on each printout*
3. *Write your name and index number on the compact disks*
4. *Write the name and version of the software used for each question attempted in the answer sheet*
5. *Passwords should not be used while saving in the compact disks*
6. *Answer all the questions*
7. *All questions carry equal marks*
8. *All answers must be saved in your compact disks*
9. *Make a printout of the answers on the answer sheets provided*
10. *Hand in all the printouts and the compact disks.*
11. *This paper consists of 4 printed pages. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

22. KASSU School intends to carry out mathematics contest in their school for the year 2021. The following is a standard letter inviting other schools to the event.

(a) (i) Create a folder; name it as your name and admission number. (2 marks)

(ii) Using word processor, create the document as it appears. Give the filename **CONTEST** in the folder created (a)(i) above. (19 marks)

THE PRINCIPAL **September 4TH 2021**

……

Dear Sir/Madam,

RE: KASSU SCHOOL ANNUAL NATIONAL MATHEMATICS CONTEST

We have the pleasure to invite your school for the National Mathematics Contest sponsored by the Worldwide Tech Ltd and Brooklyn University to be held at KASSU School on **Saturday 2nd October 2021 starting at 8.00am.**

The objective of the contest is to demystify the perception and fear that students have towards mathematics as being difficult in order to improve the performance of the subject in the country. All participating students will receive Certificates of Participation and those who excel will receive trophies and certificates of merit. Top students i.e. position 1 & 2 per form and in each category (Junior and Senior); boys, girls and mixed, will receive trophies. **Brooklyn University shall award a one-year full scholarship fees** to the **Best Form Three Boy** and **Best Form Three Girl**.

The mathematics department that produces the top boy and girl at the grand finale will win a cash prize of **Ksh 150,000 for the department.**

Please confirm your participation by calling the school through **Mr. Olunga on 0726927450** before 27th September 2021 to facilitate for logistical prparataions.

Yours faithfully

MR. TOMASO K. NOAH **MRS. KATE WINSLEY**

PRINCIPAL **HOD MATHEMATICS**

Value Proposotion: Exemplary Excellence in Academic Endeavours

(b) Set the page settings as follows: (4 marks)

- Paper Size: A4
- Top margins: 0.4" (1.016) cm
- Bottom margins: 0.4" (1.016) cm
- Gutter: 0.22" (0.548) cm

(c) Format the subject heading which starts with **"RE: KASSU SCHOOL…."** as follows: (3 marks)

III. Alignment: Centre
IV. Font size: 18
V. Font type: Britannic Bold

(d) Insert header "Your name and admission number" and include a line object under. (1 mark)

(e) Apply the following to the paragraph starting with *"The objective of the contest ……."*

- Hanging indent By 0.6" (1 mark)
- Line spacing to 1.3 (1 mark)

(f) Format the text containing "**Value Proposition**" as follows: (2 marks)

VI. White font color
VII. Dark red background

(g) Create a copy of the document save As **CONTEST_2** and proofread your work. (2 marks)

(h) Insert page numbering at the bottom right of each page. (1 mark)

(i) Group all objects in the school logo. (1mark)

(j) Apply the following character spacing formats to the second paragraph. (2 marks)

- Condensed by 0.9pts
- Kerning for fonts at 8 points & above.

(k) Convert all the last paragraphs into three columns of the same width and height. A line between should separate the columns. (3 marks)

(l) (i) Convert the names and designations at the bottom of the letter to one column and five rows. (3 marks)

(ii) Merge the empty rows inside the table to one cell. (1 marks)

(iii) Put a strikethrough to the names of the designations. (1 mark)

(m) Insert a watermark with any picture from your computer gallery to authenticate your document. (1 mark)

(n) Print the two documents. (2 marks)

2. XYZ is a training college that offers three courses to students. A student sits for three types of examinations every semester. Each examination is marked out of 100%. The following table shows sample data collected from the database:

RECORD NO.	STUDENT ID	STUDENT NAME	EXAM CODE	GENDER	COURSE CODE	DATE ENROLLED	COURSE DESCRIPTION	TUITION FEE	SEMESTER	SCORE
1.	ENG-001	MIKE	01	M	D-ENG	01/11/2017	Diploma in Engineering	Sh. 25,000	2	75
2.	CSC-002	KIOKO	02	F	D-CSC	02/11/2017	Diploma in Computer Science	Sh. 35,000	2	80
3.	NUR-003	ABIUD	03	M	D-NUR	03/11/2017	Diploma in Nursing	Sh. 15,000	2	65
4.	ENG-004	JANE	02	F	D-ENG	01/11/2017	Diploma in Engineering	Sh. 25,000	2	60
5.	CSC-002	KIOKO	03	F	D-CSC	02/11/2017	Diploma in Computer Science	Sh. 35,000	2	78
6.	NUR-003	ABIUD	01	M	D-NUR	03/11/2017	Diploma in Nursing	Sh. 15,000	2	72

a). Using a database management application split the information in the above table into three tables namely; (15 marks)

bb) Student enrolment
cc) Exam performance
dd) Courses offered

b). Create a relationship between the three tables (3 marks)

c). Create appropriate forms to be used for entering the records (6 marks)

d) Create a query to:

i. Show all students whose score is greater than 70% save it as ***HighScore*** (3 marks)

ii. Show students whose name end with the letter 'E' save it as ***Engineers*** (3 marks)

iii. Show all students taking Diploma in Computer Science save it as ***Comps*** (3 marks)

e). Create a report called ***Tuition Summary*** displaying the following details: (7 marks)

- Student ID
- Student Name
- Course Description
- Tuition fees
- Total fees collected

f). Using a report called ***ANALYSIS***, create a column chart showing students performance in the exam. (5 marks)

g). Print the tables student enrolment, exam performance, courses offered, the Tuition summary and Analysis reports. (5 marks)