451/2
COMPUTER STUDIES
PAPER 2
PRACTICAL
JUNE 2022
2 ½ HOURS

KASSU JET JOINT EXAMINATION
KENYA CERTIFICATE OF SECONDARY EDUCATION

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PAPER 2
PRACTICAL

2 ½ HOURS

INSTRUCTIONS TO CANDIDATES

a) Write your name and index number in the spaces provided above

b) Sign and write the date of examination in the spaces provided above.

c) Write the name and the version of the software used for each questions attempted in the answer sheet

d) Answer all the questions

e) All questions carry equal marks

f) Passwords should not be used while saving in the diskette/removable media

g) All answers must be saved in your removable media

h) Make a print out and tie/staple them together

i) Hand in all the printout and the removable media

j) This paper consists of 7 printed pages. Candidates should check the question paper to Ensure that all the pages are printed as indicated and no questions are missing.

1. (a) The table below shows records kept by Agriculture teacher in Makonge secondary school on issuing of farm tools to young farmers club members.

   (b) Open a database program and create a database named **YF-CLUB**.   (1 mark)

   (c) (i) Create three tables named **Class, Students and Items** in the database file created in (b) using the following details.   (12 marks)

Table 1: Students_Table

Field name	Data types and properties
Student_Id	Text (Size = 4, Required = Yes)
Student Names	Text (Size = 15)
Gender	Text (size = 4), Lookup from list box with values **"M", "F"**
Class	Text (size = 2), Lookup from list box with values **"3W", "3R", "3S", "3N"**
Project Name	Text (size = 15)
Date of Birth	Date and time, Short date

Table 2: Tools_Table

Field name	Data types and properties
Tool_Id	Text (Size = 4, Required = Yes)
Tool Name	Text (Size = 8)
Number issued	Number (Size = 2)
Tool Category	Text (size = 6), Default value = Garden tools

Table 3: Issuing_Table

Field name	Data types and properties
Issuing_Id	Text (Size = 4, Required = Yes)
Student_Id	Text (Size = 4)
Tool_Id	Text (Size = 10)
Date issued	Date and time, Medium date
Returned	Yes/No (Yes for Returned)

(d) Create the relationship between the three tables and enforce referential integrity.
(2 marks)

(e)Enter the following data into the database using the respective tables.   (10 marks)

Table 1: Students_Table

Student_Id	Student Names	Gender	Class	Project Name
900	Monica Kerry	F	3W	Carrots
230	Lawi Tutu	M	3R	Kales
450	Maria Mutanu	F	3S	Spinach
600	Odima Masau	M	3N	Cabbage

Table 2: Tools_Table

Tool_Id	Tool Name	Number issued
320	Jembe	2
321	Panga	2
322	Slasher	3
323	Rake	1

Table 3: Issuing_Table

Issuing_Id	Student_Id	Tool_Id	Date issued	Returned
1	900	320	07/03/2019	Yes
2	600	321	09/04/2019	No
3	230	322	27/04/2019	No
4	900	320	17/04/2019	Yes
5	230	322	07/05/2019	Yes
6	450	321	25/05/2019	No
7	600	323	30/06/2019	Yes
8	230	322	13/07/2019	No
9	450	321	18/07/2019	No
10	600	323	07/04/2019	Yes

(f) Modify the issuing table so as to capture the cost of each tool as shown below. (2 marks)

Tool_Id	Tool Cost
320	600.00
321	450.00
322	520.00
323	320.00

(g) Create a query that would display the following:

(i) Tool category, Student name, gender, class, tools name, project name and age. Save the query as **A_query**.   (3 marks)

(ii) Student name, gender, class, tools name, number of tools issued per student.

      I.   Compute total number of tools issued to students.

      II.   Save the query as **TL_query**.   (3 marks)

(iii) Student name, gender, class, tools name, number of tools issued, tool cost, date of issue and tool category.

      I.   Compute the total cost of the tools not returned.

      II.   Save the query as **NR_query**.   (3marks)

(h)(i)Create a report based on the query **NR** showing all the fields in the query and the following:

                                      (5marks)

      I.   Total number of of tools issued.

      II.   Total cost of tools not returned.

      III.   Group records per class.

      IV.   Grand totals of cost of tools not returned.

(ii) Modify the report to appear as follows:

      I.   To have a report tile **"YOUNG FARMERS REPORT 2022"**

      II.   Underline the report title.

      III.   save the report as **"YF_REPT"**   (3 marks)

(i)   Create a form for the student table and add a subform for the tools table using the
       format in figure 1. Save the form as **YF Entry Form.**   (4 marks)

YF-CLUB ENTRY FORM

Student Name [   ]   Class [   ]   Gender [   ]   **Project Name** [   ]

Tool Name [   ]

Number Issued [   ]

Tool_Id [   ]

Figure 1

(i)Print out later each of the following: (2 marks)

- The three tables
- The three queries
- The report
- The form

2. The spreadsheet below shows Head boy contestants and votes obtained per class for **KASSUJET HIGH SCHOOL** in the year 2019.Use the worksheet to answer the questions that follows

A	B		C	D	E	F	G	H	I
1		Contestant Class	Reg. Fee	Form 1 Votes	Form 2 Votes	Form 3 Votes	Form 4 Votes	Total Votes	Average
2	**ContestantName**								
3	Mandela Morpy	4 Red	200	42	40	45	79		
4	Simiyu Wanjala	4 Blue		24	20	18	4		
5	Kiptoo Rotich	4 Blue	200	24	25	11	30		
6	Rashid Said	4Red	200	20	23	26	1		
7	Patel Rishyan	4 Blue	200	45	10	1	36		
8	Brian Kombora	4 Green		0	30	15	76		
9	Ogolla Victor	4 Red	200	54	60	40	69		
10	Ole Tumboei	4 Green		49	10	11	0		

(a)Enter the data to a spreadsheet as it appears and save it as **Election 1**   (11 marks)

(b) (i) Type the title **"KASSUJET HIGH SCHOOL** in cell Al , Bold, font size 18 then Centre across the spreadsheet.   (2marks)

  (ii) Insert a header reading "Kassu mock exam" and a footer indicating your name.   (2marks)

  (iii) Format **Reg. fee** column to display **Ksh**. as currency with 2 decimal places.   (2 mark)

  (iv) Validate all vote entries to accept values ranging from 0 to 100 and, the words "**Wrong Data entry**" to be displayed in case the rule is violated.   (2 marks)

(c) (i) Compute the Total votes for Mandela Morpy and copy the formula down the list.   (2 marks)

  (ii)Get the average votes for each contestant.   (1marks)

    Save the worksheet as **Election 2**

 (d) Retrieve Election 2 worksheet and enter a formula in cell C14 which will help to count all the Contestants who paid registration fee. Type a label against it in cell B14 "Paid Registration"
          (2marks)

(e) Registration fee was projected to be raised to 39%.

   (i) Insert a new blank column after Reg.Fee and enter the label % increment as column heading
      and a value 39 in cell C15   (2marks)

   (ii) In column D use an absolute cell referencing to predict the newly proposed Registration Fee
      for each contestant.   (3marks)

(f) By using a suitable function determine the total amount of Reg. Fee collected per class and
     total Reg.Fee collection in the school   (3marks)

     Save the worksheet as it as **Election 3**   (1mark)

(g) (i) Enter a formula in column J which will remark votes as follows by basing on Average of
     votes for each contestant: (3marks)
                        55 votes and above - "Head boy"
                        Between 40-55 - "Prefect"
                        Below 40 -"Unpopular"

   (ii) Filter out a list of prefects only having remark Head boy. Copy the filtered list to Sheet 2.
        Rename this sheet as '**prefects**'.   (3marks)

   (iii) Sort your records in descending order of average votes for candidates.   (1mark)

        Save the work as **Finalized Election**   (1 mark)

 (h) (i) Using Election 2 plot a column graph on its own sheet showing the contestant name and
        the average votes only.   (2marks)

    (ii) Rename this sheet as '**Graph**'   (1 mark)

    (iii) Label:
                  The chart title as "Head Boy's Election 2022"   (1mark)

                  Y-axis and X-axis appropriately   (1mark)

                  Legend position to the right.   (1mark)

        Save the changes to your workbook.

 (j) Print **Election 1, Elections 3 and Graph.**   (3marks)