

**451/2**  
**COMPUTER STUDIES**  
**Paper 2**  
**(PRACTICAL)**  
**2022**  
2 ½ hours



**FOCUS A365**  
A M A N Y A M F R A N C I S E . C O M P R O D U C T I O N

**Kenya Certificate of Secondary Education**  
**COMPUTER STUDIES**  
**Paper 2**  
2 ½ hours

**Instruction to candidates**

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

1. MOKASA Music Festival Institute keeps its details of its Judges in the festival in a computer database. The information below contains details obtained from two tables of the database. Study the tables and answer the questions that follow.

**Judges Table**

Judge_ID	Name	Sex	Specialty	Occupation	Basic Pay	Date Recruited	End date
J1	Thomas Akule	M	Reciting	Music Writer	17,000	20/06/2017	27/06/2017
J2	Rama Otile	M	Choir	Composer	32,000	15/06/2017	27/06/2017
J3	Eddy Yano	M	Choir	Composer	32,000	11/06/2017	25/06/2017
J4	Cynthia Roman	F	Reciting	Singer	29,000	18/06/2017	23/06/2017
J5	Glorius Kariuki	F	Folk Songs	Singer	28,000	11/06/2017	26/06/2017
J6	Evans Frederick	M	Sound effects	Deejay	24,000	12/06/2017	27/06/2017
J7	Jack Okongi	M	Dressing	Producer	20,000	11/06/2017	20/06/2017
J8	Tracy Anne	F	Chief judge	Producer	20,000	11/06/2017	27/06/2017

**Specialty Table**

Specialty_ID	Specialty	Residence
SP01	Reciting	Baringo
SP02	Choir	Umoja-1
SP02	Choir	Buruburu-4
SP01	Reciting	Jacaranda
SP03	Folk Song	Jacaranda
SP04	Sound effects	Kabarnet
SP05	Dressing	Nakuru
SP06	Chief judge	Mombasa

**Required:**

- Create a database that can be used to store the above data and save it as **FEST\_JUDGES**. (14 marks)
- Using appropriate primary and foreign keys, Create a relationship between the two tables. (3 marks)
- Enforce referential integrity between the tables. (2 marks)
- Validate the primary key entry to exactly two and four characters for the **Judge\_ID** and **Specialty\_ID** fields respectively. (2 marks)
- Create input screens for each table and use it to enter the records for each table. Save the forms as **JudgesForm** and **SpecialtyForm** respectively. (4 marks)
- Create a query that displays the number of days the judges' work for MOKASA to display Judge\_ID, Name, Specialty, Residence and No. of Days worked. Save the query as **Period\_Worked\_Query**. (3 marks)
  - Sort **Period\_Worked\_query** using the Number of days in descending order. (2 marks)
- Create query named **Totals\_Query** that displays the judges details who worked for 5 days and whose occupation starts with letter "S". (3 marks)
- Create a report that displays the Judge Name, Occupation, Specialty Name and Basic Pay.
  - Group the details according to Residence. Save the report as **JudgesReport**. (5 marks)
  - Compute the total pay for each judge after the adjudication period. (2 marks)
  - Compute the total payment made to all judges. (2 marks)
  - Title the report "**Final Payment Details Report**". (1 mark)

i) Insert a bar graph to display all Judges and their respective payments made after the period worked.  
(3 marks)

j) Print:

- **Period\_Worked\_Query and Totals\_Query.** (4 marks)
- **JudgesReport.**
- **The chart**

2. You are an accountant in MOKASA firm.. You wish to work out the pay details for a new employee and present a report.

NAME	YEARS WORKED	BASIC PAY	DEPARTMENT	SALES (KSH)	HOUR OF OVERTIME	MILEAGE (KM)
Eric	9	14000	sales	16000	10	120000
Stephen	23	18000	admin	25000	11	130000
Fred	5	7000	sales	22000	12	112000
John	17	18000	marketing	12000	15	134200
Julius	18	16000	sales	11000	22	123000
Daniel	3	25000	admin	30000	12	10200
Martin	11	19000	sales	35000	33	132000
Stanley	15	15000	marketing	14000	14	112000
Evans	11	23000	admin	25000	0	12000
Gideon	8	17000	accounts	14000	7	154000

(a) Using the information above, design an appropriate spreadsheet and enter the given data, give it a suitable title and save it as **Teller 1** (13 marks)

(b) (i) calculate the total sales and total mileage and labels them accordingly and Save the spreadsheet now as **Teller 2** (4marks)

(c) (i) The employees sales commission is calculated as 11% of the employees sales. Input this commission rate in cell C20 and label it appropriately. (2marks)

(ii) Insert a new column labeled 'sales commission' between 'sales' and 'hours of overtime' (2marks)

(iii) Create a formula to give the amount of sales commission by making reference to sales commission cell. (4marks)

(v) Copy the formula to get the sales commission for all the other employees and save the worksheet as **Teller 3** (2marks)

(d) (i) staff who work in admin and work overtime are given a bonus of shs.3600 but no overtime pay, while staff who work in other departments are paid overtime pay at a rate of shs.200 per hour. Create a new labeled 'overtime and use a function to fill the value into the column appropriately and Save the spreadsheet now as **Teller4** (4marks)

(e) (i) Create a column for the sales/mileage ratio and label it 'sales/mileage'. Use a function

to calculate the ratio and copy it down the column to fill the value for all employees.

(4marks)

(ii) Use the IF function to put the remarks 'GOOD' in a new labeled column REMARK for only those employees whose sales/mileage ratio is greater than 2 (3marks)

(iii) Save the spreadsheet now as **Teller5** (1mark)

f) Create a bar graph in a new sheet which shows the name, basic pay and sales for each employee. Give an appropriate title, label the x and y axis and the legend at the bottom

(5 mrks)

(iv) Print. Teller 2, Teller 3, Teller 4, Teller 5 and the graph (5 marks)