**451/2**

**COMPUTER STUDIES**

**Paper 2**

**(PRACTICAL)**

**JULY 2018**

2 ½ hours

**MOKASA 2 JOINT EVALUATION EXAMINATION**

**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*
12. MOKASA Music Festival Institute keeps its details of its Judgesin 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:**

1. Create a database that can be used to store the above data and save it as **FEST\_JUDGES**.(14 marks)
2. Using appropriate primary and foreign keys, Create a relationship between the two tables.(3 marks)
3. Enforce referential integrity between the tables. (2 marks)
4. Validate the primary key entry to exactly two and four characters for the **Judge\_ID** and **Specialty\_ID** fields respectively. (2 marks)
5. 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)
6. (i) 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)

(ii) Sort **Period\_Worked\_query**using the Number of daysin descending order. (2 marks)

1. Create querynamed **Totals\_Query** that displays the judges details who worked for 5 days and whose occupation starts with letter “S”. (3 marks)
2. Create a report that displays the Judge Name, Occupation, Specialty Name and Basic Pay.
* Groupthe 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. (2marks)
* Title the report “**Final Payment Details Report**” (1 mark)
1. Insert a bar graph to display all Judges and their respective payments made after the period worked. (3 marks)
2. 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,Tellr4,Teller 5 and the graph (5 marks)