NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ INDEX NO. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SCHOOL \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SIGNATURE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 DATE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**451/2**

**COMPUTER STUDIES**

**PAPER 2**

**(PRACTICAL)**

**TIME: 2½ HOURS**

**July, 2017**

**451/2**

**COMPUTER STUDIES**

**PAPER 2**

**(PRACTICAL)**

**TIME: 2½ HOURS**

**INSTRUCTIONS TO CANDIDATES**

* This paper has **two** questions.
* Answer all the **questions.**
* All questions carry equal **marks.**
* Type your name and index number at the right hand corner of each print out.
* Write your name and index number on the storage medium provided.
* Write your name and version of software used for each question attempted.
* Passwords **should not** be used while saving in your work.
* Make a printout of the answers on the answer sheets provided
* Hand all the **print outs** and the **storage medium**
* This paper consists of **4** printed pages
* Candidates should check to ensure that all pages are printed as indicated and no questions are missing.

1. a) Kirui’s milling 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 | **KIRUI’S MILLING COMPANY LIMITED****P.O BOX 625 NAKURU** |
| 2 |
| 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 Kirui’s milling company limited to sheet 2 of your worksheet. (2 marks)

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

 (4 marks)

 iii) Use relative referencing to calculate the total for the other expenses. (4 marks)

 c) i) Calculate the total expenses for each month so as to give the results as “Total expenses” on row 10. (4 marks)

 ii) On the paper provided, write the formula used to calculate the expenses for the month of April. (2 marks)

 d) i) Use absolute referencing to calculate the cumulative total expenses for the two quarters in cell H10. (4 marks)

 ii) Write the formula used to get the cumulative total on the paper provided. (2 marks)

 iii) Calculate the percentage of total expenses of the respective months and display the results on row 11 as “percentage of total expenses”. (4 marks)

 iv) Write the formulae used to get the percentage of May. (2 marks)

 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. (2 marks)

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

 Create a database file named **EMPLOYEE**. (1 mark)

 b) Create a table called **EMPLOYEE 1** with the following fields and hence enter data into it as shown in fig 1 below. NB: Choose an appropriate primary key. (14 marks)

* EMP NO
* NAME
* DATE OF BIRTH
* DEPARTMENT
* 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 | Everlyne Kitune | 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 is an 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. (3 marks)

 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. (8 marks)

 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. (5 marks)

 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.

 (6 marks)

 f)Print **EMPLOYEE1, EMPLOYEE2, LIST1, LIST 2** and **REPORT**. (3 marks)