Name …………………………………………………….…………… Index Number ……….

Candidate’s Signature ……….. School:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**451/2 :** **COMPUTER**  Date……………….........................………………………………………

Paper 2

(PRACTICAL)

2½ hours

 **@*West practice papers-2021***

**INSTRUCTIONS TO THE CANDIDATES**

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

EMPNO:

NAME:

AGE:

STATUS:

DEPARTMENT:

BASIC PAY:

**WORKERS DETAILS CAPTURE SCREEN**

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

(c) Create queries to determine:

1. number of people with basic salary greater than 32,000/= .Save the query as **Basic** **[3 Marks]**
2. number of people with basic salary less than 45,000/= and come from computer

department. Save the query as C**omputer.** **[5 Marks]**

1. 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:

1. 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]**
2. 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]**

1. Workers table;
2. YearOfBirth query;
3. WorkersReport\_2.
4. 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 |  |  |  |

1. (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]**

1. 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]**

1. 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;
	* Must have scored a mean of 45 marks and above;
	* Must have scored 60 marks and above in Mathematics;
	* 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]**

1. Create a function to find the number of applicants who are successful. **[2 Marks]**
2. Copy the entire worksheet to sheet 2 and rename it as Successful Applicants. **[3 Marks]**
3. Filter the ‘Successful Applicants’ sheet to display the records of those applicants who are successful.**[3 Marks]**
4. 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**

1. 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]**
2. Print: **[4 Marks]**
3. Sheet1;
4. Successful Applicants Sheet;
5. Admission letter1;
6. *any one* successful applicant’s admission letter in Admission letter2.