**Kenya Certificate of Secondary Education**

**FORM THREE EXAMINATION -2024**

**CODE451/1 SUBJECT: COMPUTER STUDIES Paper 1**

**February – TIME 2Hours**

**Name**: …………………………………………….……**Adm** **No**: ……….……

**Class**: ………………**Candidate’s** **Signature**: …….……..**Date**: …..…/02/2024.

**INSTRUCTION TO CANDIDATES**

* Write your name and admission number in the spaces provided above
* This paper consists of **Two** sections **A** and **B**
* Answer **ALL** questions in section **A**
* Answer question16 and any other **THREE** questions from section **B**
* All answers should be written in the spaces provided on the question paper

**FOR EXAMINER’S USE ONLY**

|  |  |  |
| --- | --- | --- |
| **SECTION** | **QUSTIONS** | **CANDIDATE’S SCORE** |
| A | 1 -15 |  |
| B | 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
|  | **TOTAL SCORE** |  |

**SECTION A: 40 MARKS**

**Answer all the questions in this Section**

1. Give two reasons why portable computers like laptops and tablets are becoming popular in the modern society **(2marks)**

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1. Peter a computer student from Upper Hill switched on his computer that is installed with Window 10 during a practical lesson. The Teacher requested him to identify the notification area on the screen and note down the programs displayed. Name three programs that are likely to be listed by Peter **(3mark) (3mark)**

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1. Explain how data in a computer system can be secured using  **(2marks)**
2. Password

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1. Audit trail

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1. Five students Walter, Faith, Mercy, Diana and Joachim scored the following marks in Mathematics 35, 76, 98, 44, and 54. They were recorded in cell C3 to C7. The teacher wanted to rank them in descending order so as to award them
2. Write down an appropriate formula that the teacher used **(2marks)**

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1. Their grades were assigned as follows

**80-100 ……………. A**

**60-79 ………………B**

**40-59 ………………C**

**Less Than 40 ……..Fail**

Write the formula used to assign the grades above **(2marks)**

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1. State two functions of disk defragmenter **(2marks)**

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1. Describe two ways that can be employed by data entry clerks to minimize on transcription errors **(2marks) (2marks)**

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1. Give three ways of disseminating information to the target group after processing **(3marks)**

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1. Mention three pieces of information that an operating system keep about a file **(3marks)**

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1. Digitizer is one of the input devices that capture data directly from source. State three areas where Digitizer is extensively used **(3marks)**

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1. Mention three parameters used to measure data integrity **(3marks)**

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1. State three circumstances that can necessitate a warm boot of a computer **(3marks)**

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1. State circumstances under which the following types of errors occur **(3marks)**
2. Truncation error

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1. Overflow error

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1. Logical error

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1. Mention two factors that affects the cost a computer **(2marks)**

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1. Describe three reasons to justify why Internet is regarded as an agent of moral degradation **(3marks) (3marks)**

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1. Nabil a computer student noticed that every time he switched on his computer during practical lessons the computer fails to boot instead displays an error message “**Invalid System Disk”**. Identify two ways of resolving of this error **(2marks)**

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**SECTION B: 60 MARKS**

**Answer question number 16 any other three questions in this section**

1. Perform the following number system conversion
2. 342base 10 to Binary **(2marks)**
3. 1FAH to Decimal **(2marks)**
4. FBH to Octal **(2marks)**
5. Using 8-bit notation , perform the twos complement on 2510 -1510, leaving your answer in decimal number system **(4marks)**
6. Perform binary operation in the arithmetic expression below **(2marks)**

**1010.112+111.102-101.112**

1. Given that 10112 is a negative number workout its three possible decimal equivalents **(3marks)**
2. Maranda Modern Bookshop sells computer accessories and need orders for supplies. A spreadsheet application is used to represent the orders as shown below. Use it to answer the questions that follow

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | A | B | C | D |
| **1** | **Item** | **Price Per Item** | **Number Ordered** | **Cost (Kshs)** |
| 2 | Mouse | 450 | 10 |  |
| 3 | Keyboard | 300 | 5 |  |
| 4 | Flash Disk | 600 | 4 |  |
| 5 | TP link | 1000 | 4 |  |

1. Use absolute reference , write a function that can be used to calculate the total amount to be paid for Keyboard **(2marks)**

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1. Identify data types in cell C4 and D3 **(2marks)**

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1. Write a function used to display total number of items whose Number Ordered is 4 **(2marks) (2marks)**

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1. Hassan realized that an image he was working with on with Word processing was too big to fit on portrait page. Name two features provided by Word processor that will help Hassan to fit the image on the page **(2marks)**

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1. State three advantages of using templates when preparing documents in Ms-Word **(3marks)**

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1. Mention four sources graphics in Ms-Word **(4marks)**

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1. What is a dynaset **(2marks)**

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1. State the difference between bound and unbound control with respect to database **(2marks)**

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1. Use an illustration to explain the following database models
2. Relational **(2marks)**

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1. Flat file **(2marks)**

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1. The table below is an extract from a database use it to answer the questions that follows

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Product Code | Product Name | Unit cost | Quantity | Total |
| 01001101 | Maize | 2000 | 10 | 20000 |
| 01223030 | Millet | 1000 | 20 | 20000 |
| 10239345 | Wallet | 100 | 10 | 1000 |
| 19019001 | Sweet | 1000 | 5 | 5000 |

1. Give the most appropriate data type for Product code and Total **(2marks)**

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1. Assume that the table above represent the result of a query. State the expression that should be entered at the builder to calculate the total **(2marks)**

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1. State three functions of a primary key **(3marks)**

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1. Define the following terms
2. Downloading **(2marks)**

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1. Hyperlink **(2marks)**

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1. Use an example to describe the main parts of the URL **(4marks)**

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1. Describe four internet services that support communication **(4marks)**

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1. Give three benefits of cloud computing **(3marks)**

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1. Describe how business enterprises in modern society use computers or ICT **(4marks)**

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1. State four safety precaution that a computer user must observe in the computer laboratory to protect him or her from eye strain **(4marks**

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1. Describe the following features with regards to Desktop publishing **(3marks)**
2. Stroke

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1. Fill

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1. Text Wrap

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1. Explain how layering is used in Desktop publishing software **(2marks)**

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1. Describe any two check spelling options supported in DTP software like Ms-publisher **(2marks)**

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