**THIKA TECHNICAL TRAINING INSTITUTE**

**MECHANICAL ENGINEERING DEPARTMENT**

**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)**

**Qualification Code:MTML6 (PRODB)**

**Qualification**  **: Mechanical Technology Maintenance technician**

**Unit of Competency : DEMONSTRATE DIGITAL LITERACY.**

**UNIT CODE :****ENG/OS/ME/BC/02/6/A.**

**CANDIDATES WRITTEN ASSESSMENT TOOL**

**MARCH 2024 SERIES**

**INSTRUCTIONS TO CANDIDATE**

1. You have **TWO HOURS** to attempt all the questions.
2. Marks for each question are indicated in brackets ().
3. This paper consists of **TWO** sections: **A and B.** Attempt all questions in section A and any **THREE** in section B.
4. Do not write on the question paper.
5. You are required to write your responses in separate booklet provided.
6. Mobile phones or any written materials are **NOT** allowed in the examination room.

**Name of the Candidate: ……………………………………………………………………**

**Registration Code of the Candidate………………………………………………….…….**

**Date: ………………………………………………………………………….…………......**

**Signature: …………………………………………….………………………………..........**

**This paper consists of 4 printed pages**

**Candidate should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

**SECTION A (40 marks)**

***Answer all questions in this section***

1. Define the term *spreadsheet.* (2 marks)
2. Distinguish between a *function* and a *formula* as used in spreadsheet. (4 marks)
3. State **four** sources of a virus in a computer. (4 marks)
4. Identify **two** examples of electronic spreadsheets (2 marks)

**THE USE OF FACEBOOK IN INVESTIGATIONS**

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acebook has been used throughout its short life as an investigation tool by various college officials to penalize students and staff alike for their misdoings. Underage drinking has always plagued college campuses but now when students post their pictures from recent debaucheries, they often forget that once something makes it online, it cannot be taken back. It's like water (H2O).

Over a hundred Thika technical training institute students found this out the hard way in 2017 when photos posted on *Facebook* surfaced showing the students at various parties misbehaving.

Several students were suspended from school and others expelled.

**Fig 1**

1. Amina wanted to save the document as Facebook. Explain the procedure that she should follow to save the document. (5 marks)
2. State **three** text formatting features applied in the above document. (3 marks)
3. State **three** paragraph formatting features in the above document. (3 marks)
4. Identify **three** components of a spreadsheet. (3 marks)
5. Define the term *word processing.* (2 marks)
6. Identify **two** ways of creating a workbook. (2 marks)
7. Describe the role of the following as used in spreadsheet. (5 marks)
8. PRODUCT ()
9. AVERAGE ()
10. SUM ()
11. MAX ()
12. COUNTIF ()
13. Distinguish between *document formatting* and *document editing* as used in word processors. (4 marks)
14. Define the term *cell referencing* as used in spreadsheets. (1 mark)

**SECTION B (60 marks)**

***Answer any three questions from this section*.**

1. a. Explain any **two** forms of unauthorized access as a security threat. (4 marks)
2. Explain **five** types of computer crimes (10 marks)
3. Karla was to use electronic spreadsheets instead of the manual spreadsheets in organizing data for her business. Discuss **three** advantages that she could have experienced from doing so. (6 marks)
4. a. State the roles of the following as used in word processing (10 marks)
5. Find and replace
6. Undo and redo
7. Thesaurus
8. Autocorrect
9. Cut
10. Cell data entries into a worksheet can be classified into different categories. Explain **four** such entries. (8 marks)
11. Define *data security.* (2 marks)
12. a. Explain **four** advantages of word processors as used in computer systems. (8 marks)
13. Mary, during an interview was to explain to the panel control measures against viruses in a computer system. Explain **five** measures that she could have given. (10 marks)
14. Identify any **two** math and trigonometric functions as used in spreadsheets. (2 marks)
15. a. The following figure shows an extract of a spreadsheet program used by a bookshop owner to calculate profits. Use it to answer the questions that follow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E | F |
| 1 | ISBN | Cost price  (Ksh) | Selling price  (Ksh) | Profit per  book (Ksh) | Number  sold | Total profit  (Ksh) |
| 2 | 0-34-080006-2 | 1,870 | 2,465 | 595 | 56 | 33,320 |
| 3 | 0-52-154540-4 | 2,210 | 2,975 | 765 | 34 | 26,010 |
| 4 | 0-74-879116-7 | 1,275 | 1,785 | 510 | 75 | 38,250 |
| 5 | 0-34-082639-2 | 2,805 | 3,485 | 680 | 43 | 29,240 |

**Fig 2**

1. State the format that has been applied to cell range B2:C5. (2 mark)
2. Give the cell range of the cells that contain the values 75 and 43. (2 mark)
3. Write a formula which has been used in cell F2. (2 mark)
4. A formula created in (iii) is to be applied in cell F3 to F5. Explain the **three** methods that may be used to achieve this. (6 marks)

b. There are different measures that can be used to detect and prevent computer crimes and seal any security loopholes. Discuss any **four** of these measures. (8 marks)