

**THE UNITED REPUBLIC OF TANZANIA
VOCATIONAL EDUCATION AND TRAINING AUTHORITY (VETA)
BARIADI DISTRICT COUNCIL AND BARIADI TOWN COUNCIL**



**EDUCATION VOCATIONAL STREAM
FORM ONE ANNUAL JOINT ASSESSMENT
COMPUTER PROGRAMMING 1**

841/1

Time: 2:30 Hours

MARKING SCHEME

November, 2025

Instructions

1. This paper consists of section A , B and C with total of **ten (10)** questions
2. Answer **all** questions in the space provided.
3. Section A and C carry **fifteen (15)** marks each and section B carries **seventy (70)** marks.
4. All answers must be written in **black** or **blue** ink.
5. Communication devices and any unauthorized materials are **not** allowed in a assessment room.
6. Write you *Student's Assessment Name* at the top right corner of every page.

FOR ASSESSOR'S USE ONLY		
QUESTION NUMBER	SCORE	ASSESSOR'S INITIAL
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S INITIALS		



SECTION A (15 Marks)

Answer **all** questions in this section

1. For each of items (i) – (x) choose the correct answer from the given alternatives and write its letter in the box provided.

(i) Which of the following statements best describes what a computer program is?

- A The input stage of computing that gets data needed.
- B The step by step instructions that tell the computer what to do.
- C The step by step user manual on how to operate the computer.
- D The output stage of computing that outputs data needed.

B

(ii) Which of the following statements best describes the action the computer performs to process data?

- A Input -> storage/processing -> feedback. C Input -> processing/storage -> output.
- B Input -> output/processing -> storage D Feedback -> input -> processing/storage

C

(iii) Why is it important to use an Uninterruptible Power Supply (UPS) on a computer?

- A It makes the computer fast. B It backs up files.
- C It allows for saving of important work when there is a power failure
- D It allows for deleting of unnecessary files and folders.

C

(iv) Which form of data storage frequently used to increase the speed of a system currently when computer is on

- A Random-Access Memory. B Compact disc Read Only Memory.
- C Central Processing Unit. D Flash drive.

A

(v) The following secondary storage device has the highest storage capacity.

- A Digital Video Disc. B Compact Disc Recordable.
- C Blu-Ray Disk . D Compact Disc Read Only Memory.

C

(vi) It coordinates and controls the computer system, just like the brain controls the human body.

- A Bus and Data follow B Control Unit C Output Unit D Register Memory

B

(vii) Which of the following is correct order of the unit of computer memory storage in descending order in term of size?

- A Byte>Kilobyte>Bit>Gigabyte>Megabyte B Gigabyte>Megabyte>Kilobyte>Byte>Bit
- C Bit>Byte>Kilobyte>Megabyte>Gigabyte D Byte>Bit>Kilobyte>Megabyte>Gigabyte

C

(viii) A programmer

- A Is an expert of using computer applications software
- B Designs sequence of instructions of a computer execution
- C Is an expert at managing all aspects of a computer centers

B

Student's Assessment Name:

D Operates mainframe computer and computer systems during the operations

(ix) Which of the following is a sequential access storage device?

A Magnetic Disk B Blu-Ray Disk C Magnetic Tape D Zip Disk and Compact Disc

C

(x) The electronics parts inside a computer are called

A Software components

B Firmware components

C Hardware components

D Physical ware components

C

2. Match the following descriptions of computer memories in **List A** with their corresponding names in **List B** by writing the letter of the correct option beside the item number in answers table below.

List A	List B
(i) Special memories that are found in input/output devices	A. Registers
(ii) A temporary storage that holds data entered into the computer for processing	B. Control Unit
(iii) A computer storage that hold data and instructions that cannot be easily changed	C. RAM
(iv) An example of secondary storage which is not directly accessible by the CPU	D. Memory Card
(v) High speed memories that are allocated inside the CPU	E. Buffers
	F. Processor
	G. Static Memory
	H. ROM

Answers

List A	(i)	(ii)	(iii)	(iv)	(v)
List B	E	C	H	D	A

Explanation

(i) Special memories found in input/output devices

E. Buffers Buffers are special memory which is found in I/O devices.

(ii) A temporary storage for data entered into the computer

C. RAM RAM is temporary (volatile) storage for processing.

(iii) Computer storage that holds data/instructions and cannot be changed

H. ROM ROM is permanent and not easily changed.

(iv) Example of secondary storage not directly accessible by CPU

D. Memory Card Secondary storage not directly accessed by CPU.

(v) High-speed memories allocated inside the CPU

A. Registers Registers are the fastest storage inside CPU.

SECTION B (70 Marks)

Answer **all** questions in this section

3. (a) Define the following terms as used in a computer programming

(i) **Computer programming** (2marks)

- ✓ Writing instructions or commands that a computer can understand and execute to perform specific tasks.
- ✓ It involves designing, coding, testing, and maintaining computer programs.

(ii) **An algorithm** (2marks)

- ✓ A step-by-step procedure for solving a problem.
- ✓ It is a set of clear instructions that leads to a specific result.

(iii) **Programming language** (2marks)

- ✓ A formal language used to write computer programs.
- ✓ Examples include **Python, C, Java**—used to communicate instructions to a computer.

(b) Outline four (4) areas where computer programs are used for solving problems in everyday life (4marks)

(1 mark @, Any other correct 4 areas can score full marks)

- (i) Education
- (ii) Health services / hospitals
- (iii) Banking and finance
- (iv) Transport and communication
- (v) Manufacturing Industries
- (vi) Military and defense

4. The wide spread of using computers brought greater impact on the society today due to the availability of different computer applications software which increases the productivity, accuracy and time saving, therefore from the point view

(i) **Define the term computer application** (3marks)

A computer application is a software program designed to help a user perform specific tasks or solve particular problems on a computer.

Computer Application : Is a broad term that generally refers to a software program designed to perform specific task or functions on a computer.

Application software are ranged from *simple programs* like *text editors* , *calculators* to *complex software* like *graphic design tools* , *database management system* and *video games software*.

(ii) **Outline three (3) examples of computer application software your know** (3marks)

(1 mark @: Any correct 3 examples earn full marks)

- Word processors for **example MS Word**
- Spreadsheets for **example MS Excel**
- Database programs for **example MS Access**
- Graphics and design software **example Adobe Photoshop**

- (iii) Give four (4) differences between system software and application software (4marks)
(0.5 mark@ :Any 4 correct paired differences score 4 marks.)

System software	Application software
(i) Manages and controls hardware	Performs specific user tasks
(ii) Runs automatically when computer starts	Runs when user opens it
(iii) Designed for managing system operations	Designed for solving user tasks
(iv) Examples: Operating System (OS), drivers	Examples: Microsoft Word, Microsoft Excel

- 5.(a) Study carefully the figure1 below which represents the computer keyboard and answer the questions that follow

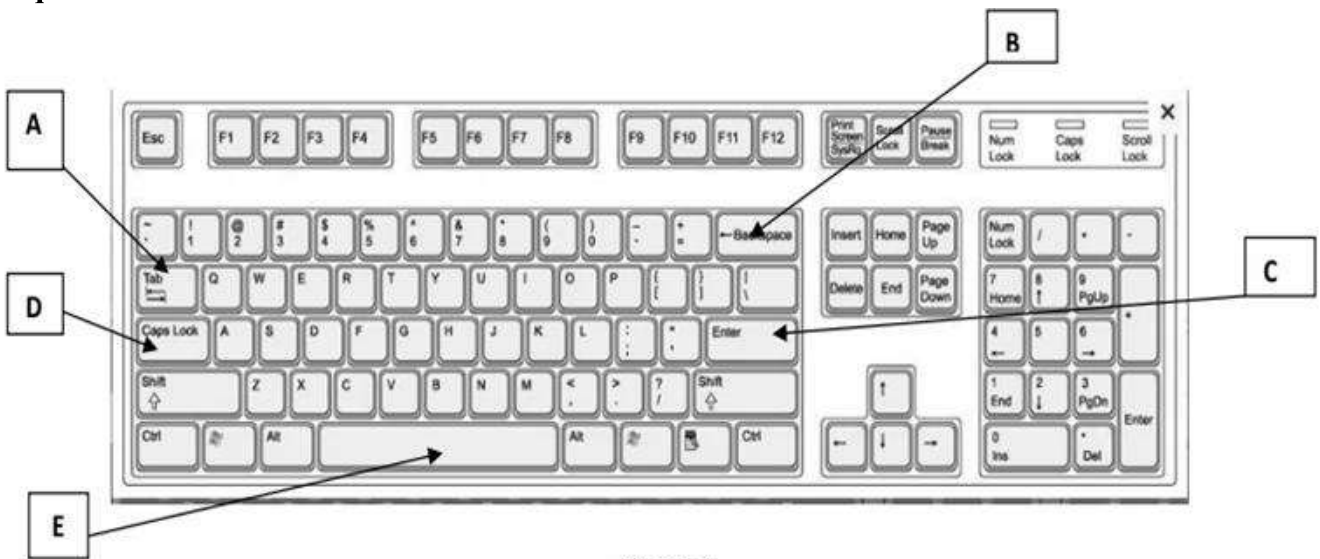


Figure 1

- (a) Write the word formed by the first six letters of figure 1 above
QWERTY (1mark)
- (b) What is the function of the following keys which are represented by the letters, B, C and D
(1marks@=3marks)

Letter	Key button	Functions of the key
B		Backspace key: Used to delete (erase) characters at the left side of the cursor position.
C		Enter (Return) key: Used to moves cursor to a second line. Used also to open the selected program of file.
D		Caps Lock key: Used to switch between uppercase and lowercase. Used to access second letter or symbol on a keyboard

(c) Differentiate between letter A from letter E.
(2marks@=4marks)

4marks

Letter A	Letter E
 Back and forward tab key Isa key on the keyboard of a typewriter or computer that is used to move several space at a time or to move to a particular position in a document.	 Space bar (Long) key: Used to provide a space between words during typing.

6.(a) Define the term computer memory (2marks)

Computer memory: Refers to the electronic storage space used to temporarily or permanently store data and instructions that a computer needs to function.

It's a critical component that enables the CPU to access *data quickly* and *efficiently* during processing.

(b) Give three (3) differences between primary memory and secondary memory (6marks)
(2 marks @: Any 3 correct paired differences score 6marks.)

Primary memory	Secondary memory
(i) Faster to access	Slower to access
(ii) Volatile (data lost when power off)	Non-volatile
(iii) Smaller storage capacity	Larger storage capacity

(c) Outline two (2) categories of Random-Access Memory (2marks)
(1mark @ = 2marks)

- Static RAM (SRAM)
- Dynamic RAM (DRAM)

7. (a) What is a word processor? (2marks)

A word processor: is application software used to create, edit, format, and print documents.

(b) List three (3) functions of word processor. (3marks)
(1mark @: 3marks)

(Other possible answers: inserting tables, spell checking, saving files)

- Typing and editing text.
- Formatting text and paragraphs.
- Printing documents.

(c) Outline two (2) examples of word processor you know (2marks)

(1 mark @ = 2marks: Any correct two examples score 2 marks)

- Abi word.
- Apple iWork - Pages.
- Apple Text Edit - Apple mac OS
- Corel WordPerfect.
- Google Docs (online and free).
- Libre Office
- Microsoft Word (Ms office 2007-2021)
- Open Office
- Sun Star Office

(d) Word processor is superior of having different features which help user to make document attractive from the point of view. Explain any three (3) features available on word processor program. (3marks)

(1mark @ = 3marks : Any correct three features score 3 marks.)

- Spell checker
- Insert tables and image
- Formatting tools (font size, style, color)
- Page layout features (margins, orientation)
- Search and replace
- Headers and footers - The headers and footers of a document can be customized to contain page numbers, dates, footnotes, or text for all pages or specific pages of the document.

8. (a) Define the term electronic spreadsheet (2marks)

Is an electronic workbook that gives us the ability to perform business and scientific calculation effortless as well as statistical data analysis. **Or**

Is a computer application that is designed to add, display, analyze, organize and manipulate data arranged in rows and columns.

(b) Give two examples of electronic spreadsheet know (2marks)

(1mark @ = 2marks : Any correct three examples score 2 marks.)

- Ms Excel-(From Microsoft Co-operation)
- Lotus 1-2-3 -(From IBM)
- Open Office.org Calc -(From Linux)
- Apple iwork Number-(From Macintosh)

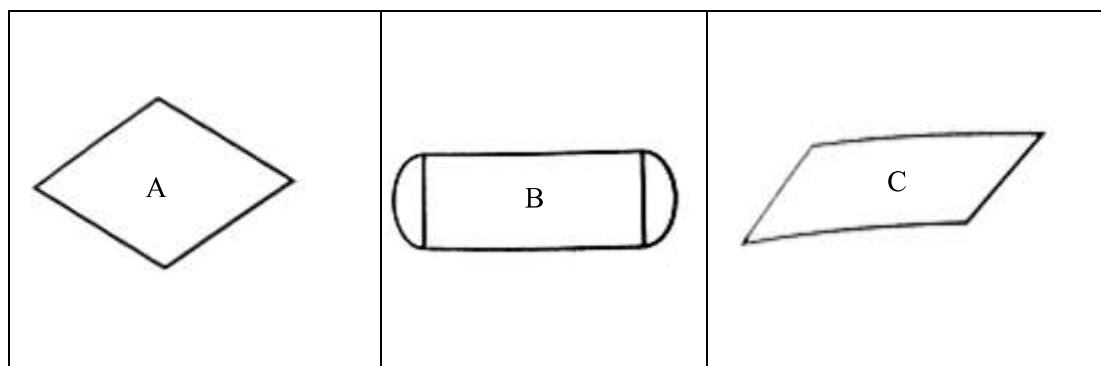
(c) Study the following a given snapshot of a worksheet and answer the questions that follow.

	A	B	C	D	E
1	MONTHLY EXPENSE RECORDS	ITEM			TOTAL
2		FOOD	DRINKS	TRANSPORT	
3	January	13450	24500	18000	
4	February	25000	21500	17500	
5	March	23500	18500	16000	
6	April	24500	19500	26500	
7	May	25500	21500	36000	
8	June	29500	28500	45000	
9	AVERAGE				
10	MAXIMUM	29500			

Figure 2

- (i) Write down the formula will be used to calculate TOTAL in E3 (2marks)
 =(B3+C3+D3) or =SUM(B3,C3,D3) , =SUM(B3:D3)
- (ii) Which formula or function was used to calculate the maximum amount of FOOD in cell B10 (2marks)
 = MAX(B3:B8) or = MAX(B3,B4,B5,B6,B7,B8)
- (iii) What function will be used to calculate average of TRANSPORT in cell D9 (2marks)
 = AVEARAGE (D3:D8) or =AVERAGE (D3, D4, D5, D6, D7, D8)
 = (D3+D4+D5+D6+D7 + D8)/5

9. (a)Study the carefully following flowcharting symbols of assembly language

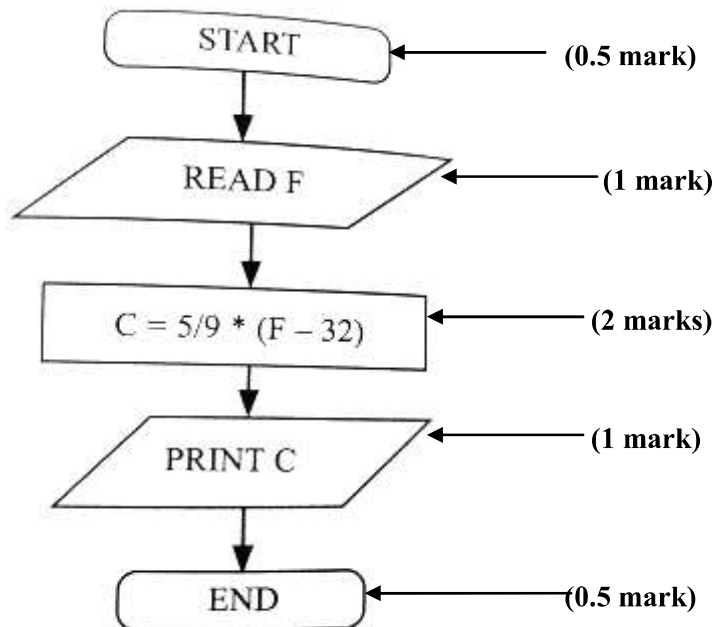


- (i) Write the names of the following flowcharting symbols (3marks)
 (1mark @ = 3marks : Any correct two names score 2 marks.)
Letter A : Decision **Letter B :** Terminal **Letter C :** Input / Output
- (ii) What is the differences between symbol A and C (2marks)
 (1mark @ = 2marks : Any correct two difference score 2 marks.)
Letter A : Decision Used to ask a question that can be answered in a binary format (Yes / No ,True / False) **While Letter C : Input / Output** Used for any Input/ Output (I/O) operation .Indicates that the computer is to obtain data or output results.

- (b) Study carefully the following flow chart to convert temperature from Fahrenheit (F) to Celsius ($^{\circ}\text{C}$) (5marks)

Start
Declaration of variables:
F,C as numbers
Initialization of input variables.
Read F;
Processing:
 $C = (5/9) * (F - 32);$
Print:C;
End;

Draw the flow chart to convert temperature from Fahrenheit (F) to Celsius ($^{\circ}\text{C}$)



SECTION C (15 Marks)

Answer question **ten (10)**

10. In order computer system to work properly and efficiently must be maintained and repaired. By giving its purpose , explain any four (4) common tools used for implementation of computer maintenance .

Introduction (2marks)

computer maintenance

Computer maintenance: Means keeping your computers and laptops in *good condition* through regular *cleanings, hard drive, updates, and virus prevention*.

Computer maintenance :Refers to a set of *actions or processes* which aim to ensure the proper *functioning* of computer equipment.

System maintenance: Is essential for keeping a *computer system* efficient.

It involves *routine checks*, updates, and repairs, ensuring everything functions properly.

Body (3marks @ any point)

The list of common tools used for computer maintenance

(i)Screwdriver

Purpose: Help to screw tighten and loosen screws efficiently .Most computer components , such as motherboards ,power supplies and drives are secured with phillips head screws therefore a good and quality screwdriver is needed.

(ii) Anti-Static Wrist Strap.

Purpose: It help to prevent electrostatic discharge (ESD) that can damage sensitive electronic components and reduces the risk of static electricity to damage the computer parts.

(iii)Cable Ties or Zip Ties

Purpose : Cable ties or Zip ties help in binding and securing cables. It help to organize and manage cables inside the computer case (motherboard) to improve airflow.

(iv)Needle-Nose Pliers

Purpose : It can be used for gripping and manipulating small components or for bending metal tabs on the computer. They can be handed when dealing with tight spaces.

(v)Flashlight or Headlamp

Purpose: It help to illuminate the interior of the computer case , making it easier to see small components and connectors especially in low light conditions.

(vi)Parts Tray or Magnetic mat

Purpose: It help to keep track of screws and small components during dis-assembly computer case. Helps to prevent losing screws.

(vii)PC Toolkit or Screwdriver Kit

Purpose: It is used during dis-assembly and assembly computer and may include various tools like *screwdriver , precision screwdrivers* and other *tools* required for working on *electronic devices*.

Conclusion (1mark)