

061205T4CYB

CYBER SECURITY TECHNICIAN LEVEL 5

SEC/OS/CR/01/5/A

PERFORM COMPUTER REPAIR AND MAINTENANCE

Nov. / Dec. 2023



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

WRITTEN ASSESSMENT

Time: 3 hours

INSTRUCTIONS TO CANDIDATES

1. This paper has three sections **A, B** and **C**.
2. You are provided with a separate answer booklet.
3. Marks for each question are as indicated.
4. Do not write on the question paper.

This paper consists of 8 printed pages
Candidates should check the question paper to ascertain that
all pages are printed as indicated and that no questions are
missing

SECTION A: (20 Marks)

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

Each question carries one Mark.

1. A unit that receives information from CPU and converts into suitable human readable form is
 - A: Input Unit
 - B: Output Unit
 - C: Processing Unit
 - D: Language Translator
2. Which command is used to record a user login session in a file
 - A: macro
 - B: read
 - C: script
 - D: none of the mentioned
3. From what location is the 1st computer instructions available on boot up?
 - A. ROM BIOS
 - B. CPU
 - C. boot.ini
 - D. CONFIG.SYS
4. Which of the following is not an input device?
 - A. OCR
 - B. Optical scanners
 - C. Voice recognition device
 - D. COM (Computer Output to Microfilm)
5. Video-Conferencing requires a microphone, speakers and a _____ attached to your computer.
 - A. Mouse
 - B. Keyboard
 - C. Video camera
 - D. Scanner

6. Full form of PSU which is an internal component used to supply the power.
 - A. Power supply unit
 - B. Permanent supply unit
 - C. Placement supply unit
 - D. Programmable supply unit
7. POST stands for _____.
 - A. Power On Selfie Test
 - B. Power One Self-Test
 - C. Power On Self-Test
 - D. Power On Self-Testing
8. What is the term for any device which is connected to any computer system from outside?
 - A. Peripheral
 - B. RAM
 - C. Memory
 - D. Bus
9. A device that not only provides surge protection, but also furnishes the computer with battery backup power during a power outage is _____.
 - A. Battery strip
 - B. UPS
 - C. Surge strip
 - D. USB
10. Which of the following is LEAST likely to be causing loss of video display in a PC?
 - A. defective RAM (bank zero)
 - B. defective microprocessor
 - C. crashed hard drive
 - D. loose video card

11. Missing slot covers on a computer can cause?
 - A. over heat
 - B. power surges
 - C. EMI.
 - D. incomplete path for ESD
12. A hard disk is divided into tracks which are further subdivided into:
 - A. clusters
 - B. sectors
 - C. vectors
 - D. heads
13. A wrist grounding strap contains which of the following:
 - A. Surge protector
 - B. Capacitor
 - C. Voltmeter
 - D. Resistor
14. ESD would cause the most damage to which component?
 - A. Power supply
 - B. Expansion board
 - C. Monitor
 - D. Keyboard
15. What should one check first if there is no single beep on PC boot up?
 - A. system board
 - B. RAM
 - C. microprocessor
 - D. Speaker
16. During the normal PC boot Process which of the following devices is active first?
 - A. RAM BIOS
 - B. CMOS
 - C. ROM BIOS
 - D. Hard Disk Notification

17. Specialized program that allows the user to utilize in specific application is classified as
- A. Relative programs
 - B. Application Programs
 - C. Replicate Programs
 - D. Logical Programs
18. Which of the following is a system program?
- A. Management Information system
 - B. Enterprise Resource planning system
 - C. Compiler
 - D. Financial Accounting system
19. Which one of the following is not an input device?
- A. Keyboard
 - B. Printer
 - C. Scanner
 - D. Mouse
20. A computer _____ is a malicious code which replicates itself by copying itself to other programs
- A. Worm
 - B. Program
 - C. Virus
 - D. Code

SECTION B: (40 Marks)

Answer all questions in this section.

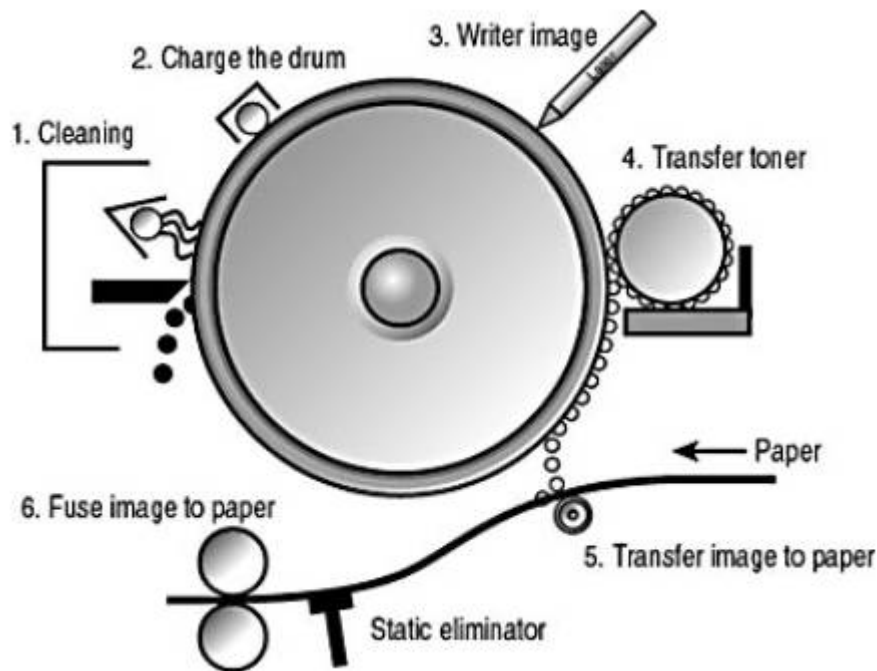
21. Outline FOUR job-related professional behaviors one needs to have when dealing with a customer. **(4 Marks)**
22. Explain TWO reasons for Throttling a CPU. **(4 Marks)**
23. Differentiate between hibernate and standby **(4 Marks)**
24. Differentiate between Northbridge and Southbridge by describing the function of each within the motherboard. **(4 Marks)**
25. Discuss THREE features that are engineered to help combat the cooling problem in laptop processors. **(6 Marks)**
26. Define each of the following devices:
 - i) Printers **(2 Marks)**
 - ii) Scanners **(2 Marks)**
27. Give TWO interfaces that are used to attach hard drives to a PC. **(2 Marks)**
28. Describe the term Overclocking as used in CPU operation **(2 Marks)**
29. Distinguish between Integrated and non-integrated System Boards **(4 Marks)**
30. The operating system plays an integral role in the usage of the computer, outline SIX categories of such tasks. **(6 Marks)**

SECTION C: (40 Marks)

Answer any **two** questions in this section.

Question 31

- a) It is important to take care of your laptop to keep it in good shape; prevention is always better than cure. There are a number of easy things that you can do to keep your laptop in great shape; explain any **FIVE** ways in which you would use to achieve this. **(10 Marks)**
- b) Describe the steps involved in the working of a laser printer shown in the diagram shown below: **(10 Marks)**

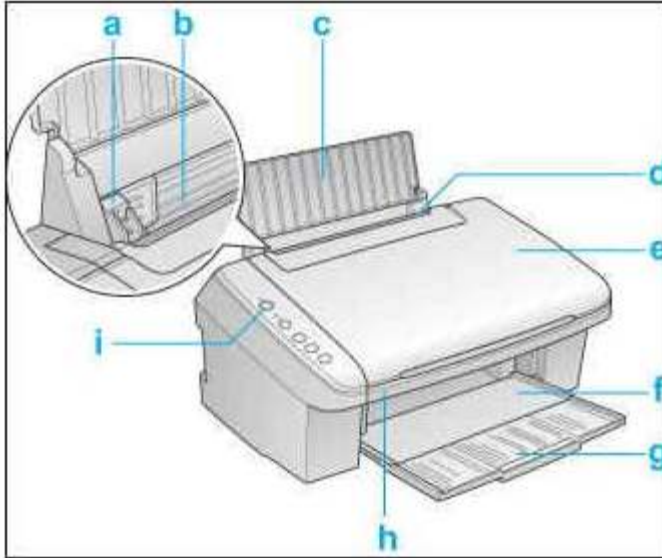


Question 32

- a) Name any **EIGHT** parts of an ATX motherboard. **(4 Marks)**
- b) The health problems mostly associated with the use of computer equipment are listed below: Discuss each of them. **(6 Marks)**
- i. Upper limb disorders,
 - ii. Eye problems,
 - iii. Stress and fatigue
- c) The CPU is the brain of the computer that does all the logical and arithmetic operations. Explain the fetch- execute cycle of the processor. **(10 Marks)**

Question 33

- a) Describe the function of any SIX parts of a typical ink jet printer as shown by the letters a to i in the figure below: **(6 Marks)**



- b) Distinguish between Integrated and non-integrated System Boards **(4 Marks)**
- c) Troubleshooting a computer Hardware device involves steps which require one to have good communication and soft skills. Describe any FIVE steps that can be followed when troubleshooting a customer's malfunctioned hardware device. **(10 Marks)**

END