061005T4ICT

ICT TECHNICIAN LEVEL 5

IT/OS/ICT/CR/03/5/A

PERFORM COMPUTER REPAIR AND MAINTENANCE

Nov. /Dec. 2022

THE KENYA NATIONAL EXAMINATIONS COUNCIL

WRITTEN ASSESSMENT

Time: 3 hours

INSTRUCTIONS TO CANDIDATE

Maximum marks for each question are indicated in brackets ( ).

This paper consists of **THREE** *sections: A, B and C.*

Answer questions as per instructions in each section.

You are provided with a separate answer booklet.

Answer all questions in English.

This paper consists of SEVEN (7) 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 (20MARKS)

1. Which password is used in the BIOS (CMOS) to prevent end users from accessing the BIOS contents? (1 Mark)

    A. Supervisor

    B. User

    C. Administrator

    D. Local

2. Why would the display on a laptop get dimmer when the power supply from the AC outlet is disconnected? (1 Mark)

    A. The laptop cannot use full brightness when on battery power

    B. Power management settings on the laptop.

    C. To operate properly, laptop displays require an alternating current power source.

    D. Security settings on the laptop.

3. What does a yellow exclamation point next to a device in the Device Manager indicate?

    (1 Mark)

    A. A driver is not properly installed for this device.

    B. The device is disabled.

    C. The driver is not digitally signed.

    D. The device driver needs to be upgraded.

4. Which tool should always be used when working inside the computer? (1 Mark)

    A. Cordless drill

    B. Antistatic strap

    C. Multimeter

    D. Screwdriver

5. On a laptop, which of the following would most likely be a pointing device? (1 Mark)

    A. Serial mouse

    B. PS/2 mouse

    C. USB mouse

    D. Touchpad

6. Which of the following storage technologies is used by traditional hard disk drives? (1 Mark)

    A. Magnetic

    B. Optical

    C. Impact

    D. Solid

7. What is a prewritten plan that is put in place when things go wrong? (1 Mark)

    A. Emergency evacuation

    B. Disaster recovery plan

    C. Disaster protocol plan

    D. Emergency information plan

8. Which of the following devices has the largest security risk? (1 Mark)

    A. Desktop

    B. Laptop

    C. Mobile phone

    D. Desktop

9. What risk does a flash or thumb drive have? (1 Mark)

    A. It is small

    B. It can be smuggled into a secure area for the purpose of stealing files

    C. It is store files

    D. Portability

10. A_____ allows you to write on screen with a digital pen and convert that

  writing into characters that the PC can process (1 Mark)

    A. Monitor RS

    B. Tablet PC

    C. Database manager

    D. Media Center

11. What does AGP stands for? (1 Mark)

    A. Accelerated Gaming Processor

    B. Advanced Graphics Processor

    C. Advanced Graphics Port

    D. Accelerated Graphics Port

12. System files are allocated at? (1 Mark)
   A. Boot area

   B. FAT area

   C. Data area

   D. Directory

13. _____interface consists of things like program counter, register, interrupts and terminal.

   (1 Mark)
   A. Hardware

   B. Software

   C. Data

   D. Office

14. Which of the following shows characteristics of both hardware and software (1 Mark)
   A. Operating system

   B. Firmware

   C. Data

   D. Windows

15. The output of a computer power supply is in the form of? (1 Mark)
   A. Alternating current

   B. Direct current

   C. Amperage

   D. Ohms

16. Which of the following command is used to switch between the window programs? (1 Mark)
   A.Alt+Tab

   B.Alt+F4

   C.Ctrl+Tab

   D.Alt+Enter

17. To prevent the addition and deletion of files on a disk or tape we use? (1 Mark)
   A.Format

   B.Write protect

   C.Create back up

   D.None of above

18. During the boot process, the____ looks for the system file   (1 Mark)

    A. CD

    B. BIOS

    C. CPU

    D. DVD

19. Which of the following resources is not protected by the operating system?   (1 Mark)

    A. I/O

    B. Memory

    C. CPU

    D. Disk

20. _____Is used to blow dust from any parts of the computer without touching the components.

    (1 Mark)

    A. Soft cloth
    B. Cable ties compressed air
    C. Parts organizer
    D. Fan

SECTION B (40 marks)

Answer ALL questions in this section

21. Explain any **two** classifications of computers based on functionality. (4 marks)

22. Outline four examples of output voltages in computer's power supply unit. (4 marks)

23. Computer-based training is a common phenomenon in many organizations. Explain **two** benefits that could be realized when using this training method**.** (4 marks)

24. Differentiate between volatile and non-volatile computer memory. (4 marks)

25. Lawrence was given a printer for domestic use. Explain **two** challenges he is likely to face with the printer. (4 marks)

26. Explain **two** circumstances under which a computer would use *virtual keyboard*. (4 marks)

27. Distinguish between a *sector* and a *track* as used in storage media in computers. (4 marks)

28. Describe each of the following types of computer buses; (4 marks)

    i) Internal.

    ii) External.

29. Explain each of the following terms as used in computer monitors;

    i) Resolution; (4 marks)

    ii) Backlight (4 marks)

SECTION C (40 MARKS)

Answer ANY TWO questions in this section.

30.   a) Zain was diagnosing a client computer that was extremely slow when opening and executing applications programs. Suggest any four the possible problem of the computer.

(8 marks)

b) Ruth was required to install certain software in her computer. Outline **four** types of software installation methods that she could apply.   (8 marks)

c)   When procuring a computer, more emphasis should be on motherboard. Outline **four** examples of expansion slots that could be found in the motherboard   (4 marks)

31. a) List **four** factors that should be considered when selecting a motherboard, other than cost.

(8 Marks)

b) Janice was advised to perform a cold boot after troubleshooting a software problem with her computer. Explain **four** reasons that could have influenced her friend's advice.

(8 Marks)

c) Maria was diagnosing a computer that was not powering on. Outline **four** possible causes of the problem.   (4 marks)

32. a) High level formatting is rarely used in computers. Explain **two** conditions that could Influence this type of formatting.   (4 marks)

b) Differentiate between *boot loader* and *linker* as used in computers.   (4 marks)

c) List **four** examples of utility software used in a computer.   (4 marks)

d) Julia was required to write a technical report on a printer that was having frequent paper jams, Explain FOUR possible causes for this problem that she could have highlighted in her report.   (8 marks)