



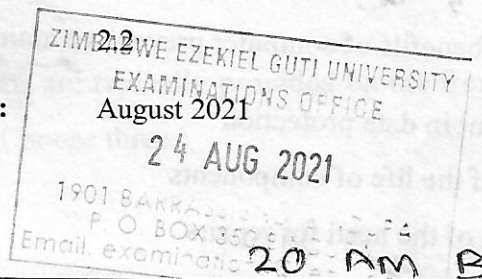
ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF HEALTH, SCIENCE AND TECHNOLOGY

DEPARTMENT OF DIGITAL TECHNOLOGY

EXAMINATION PAPER

COURSE CODE : CDT 210
COURSE TITLE : Workshop Practice
SPECIAL REQUIREMENTS : None
DURATION : 3 Hours
LEVEL :
DATE :



INSTRUCTIONS TO CANDIDATES:

1. This paper consists of 2 sections
2. Answer **ALL** Questions in booklet provided.

Section A: Multiple Answer Questions

1. What are three pieces of information a level one technician should gather from a customer? (Choose three.)

- A. contact information
- B. description of the problem
- C. details of any recent changes to the computer
- D. output from diagnostic software
- E. output from a remote connection to the customer computer
- F. current CMOS settings.

_____ ; _____ ; _____ (6

marks)

2. What are three benefits of computer preventive maintenance? (Choose three.)

- A. improvement in data protection
- B. extension of the life of components
- C. elimination of the need for repairs
- D. reduction in the number of equipment failures
- E. time savings for technicians making repairs
- F. improvement in RAM access time

_____ ; _____ ; _____ (6 marks)

3. What are three common input devices found on laptops? (Choose three.)

- A. Touchpad
- B. PS/2 keyboard
- C. fingerprint reader
- D. AC power connector
- E. web camera

F. external monitor

_____ ; _____ ; _____ (3 marks)

4. What are three important considerations when installing a CPU on a motherboard?
(Choose three.)

- A. Antistatic precautions are taken.
- B. The CPU is correctly aligned and placed in the socket.
- C. The CPU contacts are first cleaned with isopropyl alcohol.
- D. The CPU heat sink and fan assembly are correctly installed.
- E. The CMOS EPROM battery is removed prior to installing the CPU.
- F. Maximum insertion force is applied to the load lever so the CPU is locked in place.

_____ ; _____ ; _____ (6 marks)

5. Which three PC desktop functions are typically provided on the front panel and must be connected to the motherboard? (Choose three.)

- A. network activity light
- B. PC power button
- C. drive activity light
- D. USB connectors
- E. CPU temperature indicator
- F. audio power button

_____ ; _____ ; _____ (3 marks)

6. Refer to the exhibit. As part of the process of building a computer, what is the proper order of the first three steps in the installation of a power supply? (3marks)

Steps	Description
1	Insert the power supply into the case.
2	Connect the power cord to the power supply.
3	Secure the power supply to the case using the proper screws.
4	Align the holes in the power supply with the holes in the case.

Section B Free Response Questions

Answer all questions

7. Place the six stages of the troubleshooting process in the correct order. (12 marks)
- i) Test the theory to determine the cause
 - ii) Verify full system functionality and, if applicable, implement preventive measures
 - iii) Identify the problem
 - iv) Document findings, actions, and outcomes
 - v) Establish a theory of probable cause
 - vi) Establish a plan of action to resolve the problem and implement the solution
8. Explain at least three things that you must take care of when applying a thermal conductor between an old CPU and a used heat sink.
(6 marks)
9. Computer storage devices are either made from static RAM or dynamic RAM
- i) List at least **THREE** differences between static RAM (SRAM) and dynamic RAM (DRAM) (6 marks)
 - ii) Write down at least two storage device made from SRAM and another storage device made from DRAM (4 marks)

10. In reference to desktop motherboard:

- i). What is a form factor (2 marks)
- ii). Explain how or why the motherboard form factor determine the size of a case you can buy when building a CPU (3 marks)
- iii). What is the difference between a multiuser and a multitasking operating system? (4 marks)

11. In a computer laboratory situation, technicians often carry out periodic security and software updates as part of preventive maintenance. Write down three reasons why you think preventive maintenance should always be done on laboratory equipment? (6 marks)

12. List four types of storage devices that are often used by desktop computers (4 marks)

13. A mining employee spends much of the time working with a laptop down in the mines. What three factors would be of most concern to a technician when doing preventive maintenance on the employee's laptop? (9marks)

14. Explain three benefits result from doing frequent preventive maintenance on desktop PCs? (9marks)

15. What four tools would be required by a technician during a preventive maintenance on a desktop PC? (8 marks)