

PAN AFRICA CHRISTIAN UNIVERSITY

DIPLOMA INFORMATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY
COURSE CODE: DICT 0211
COURSE TITLE: HARDWARE MAINTENANCE AND NETWORKING
CAMPUS: ROYSAMBU
EXAM DATE: TUESDAY, XXXX, DECEMBER, 2024
TIME: 2:00PM -5:00PM

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Three questions in Section **B**.
- Write only your **student number** on the answer booklet provided.

SECTION A

(Answer ALL questions in this section)

Question 1:

- a) Betty is experiencing frequent overheating issues with her computer, which are causing unexpected shutdowns. As a computer technician, explain any **THREE** causes of microprocessor overheating that could be contributing to this problem

[6 Marks]

- b) Santino, a DICT student, is having trouble connecting his laptop to various external devices. Explore **TWO** possible reasons for this issue

[4 Marks]

SECTION B

(Answer any THREE (3) questions in this section)

Question 2:

- a) Your computer is failing to boot into Windows properly, leaving you unable to access your work. Discuss **THREE** reasons why Windows might not boot.

[6 Marks]

- b) Collins is required to replace a faulty RAM chip in the computer. Expound on **TWO** precautions he could consider to accomplish this.

[4 Marks]

Question 3:

- a) As a Techie you have encountered a PC that intermittently halts during the boot process. Explore **SIX** steps you would take to diagnose whether the issue is related to hardware or software.

[6 Marks]

- b) Explain **TWO** functions of an Uninterruptible Power Supply (UPS)

[4 Marks]

Question 4:

You are ICT Assistant at PAC University.

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- a) Explain any THREE considerations you would observe to keep off dust from the computer components **[6 Marks]**
- b) Preventive maintenance plans are developed based on at least two factors: **Computer location or environment** and Computer **use**. Explain why this is the case. **[4 Marks]**

Question 5:

Mike, an IT technician is trying to print out invitations for a birthday party, but the printer won't print. The technician has some ideas about what could be causing this. Explain five steps the IT Technician will consider in resolving this issue **[10 Marks]**

Question 6:

A computer network is a group of devices connected with each other through a transmission medium such as wires, cables etc. These devices can be computers, printers, scanners, Fax machines etc. With this in mind;

- a) Discuss any three types of Networks **[6 Marks]**
- b) Highlight four Network Topologies **[4 Marks]**

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