



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF THE

DIPLOMA IN INFORMATION TECHNOLOGY

FIRST SEMESTER, 2023/2024

(AUGUST-DECEMBER, 2023)

DIT 0204 : HARDWARE SUPPORT AND
MAINTENANCE

STREAM: Y2 S1

TIME: 2 HOURS

DAY: THURSDAY, 12.00 -2:00 PM

DATE: 30/11/2023

INSTRUCTIONS

- 1. Do not write anything on this question paper.***
- 2. Answer Question ONE [Compulsory] and any other TWO Questions.***

Question One

- Describe the following terms giving their main purpose.
 - Ports (Connectors) (2 mks)
 - BIOS (2 mks)
 - Computer hardware (2 mks)
- What is hardware architecture? (2 mks)
- Give four examples of output devices. (2 mks)
- Outline four safety aspects that should be considered when selecting a power supply unit. (2 mks)
- What are the two functions of a power supply unit (PSU) in a computing device? (2 mks)

- f. List four steps a PC technician needs to take to protect themselves against electrical shock and burns. (4 mks)
- g. Name and describe FIVE connectors that are found inside a computer case. (5 mks)
- h. What is an operating system and what are its main tasks in a computer system? (4 mks)
- i. Name (in full) three computer ports that support video. (3 mks)

Question Two

- a. Why is it important to have the same form factor for the case, motherboard and power supply unit? (7 mks)
- b. Name and describe seven components that are housed in inside a computer case. (7 mks)
- c. There are three versions of the USB in use currently. Name and explain them. (6 mks)

Question Three

- a. Name and describe in detail FIVE roles and responsibilities that a PC technician will play during the course of their career. (10 mks)
- b. Explain the boot sequence when booting a computer. (10 mks)

Question Four

- a. Give 3 examples of secondary storage devices. (2 mks)
- b. Describe the main parts of the computer hardware. (8 mks)
- c. Explain five classifications of connectors. (10 mks)

Question Five

- a. Explain three steps a PC technician needs to take to protect themselves against electrical shock and burns. (3 mks)
- b. Why is it important to have the same form factor for the case, motherboard and power supply unit? (7 mks)

- c. Computer technicians experience several challenges when carrying out routine maintenance. Explain three challenges they could experience. (6 mks)
- d. Outline four factors that should be considered selecting a troubleshooting technique. (4 mks)