

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

CHUKA & EMBU

FIRST-YEAR EXAMINATION FOR THE AWARD OF CERTIFICATE IN
COMPUTER SCIENCE

COSC 00106: INSTALLATION AND CUSTOMIZATION

STREAMS: CERT. COMPSCI

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 16/4/2025

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- Answer questions **ONE** and **TWO** other questions
- Do not write anything on the question paper
- This is a **closed-book exam**, No reference materials are allowed in the examination room
- There will be **NO** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely.
- Marks are awarded for clear and concise answers.

SECTION A (ANSWER ALL QUESTIONS)

QUESTION ONE (30 MARKS)

- Explain the following terms as used in a computer:
 - Boot order (2 marks)
 - Formatting (2 marks)
 - Partitioning (2 marks)
 - File system (2 marks)
- Explain what an operating system is and give **THREE** examples of popular operating systems. (4 marks)
- Explain the difference between a surge protector and a UPS. (2 marks)
- Explain what a computer motherboard is and List any **TWO** components attached to it. (3 marks)
- Explain the difference between Mi-Fi and Wi-Fi as used in installation and customization. (2 marks)
- Explain what is a device driver and what is its purpose. (4 marks)
- State three reasons why you should perform a backup of your important files and folders. (3 marks)
- Mary intends to use a USB port instead of a parallel port to connect peripheral devices on her computer. State any **FOUR** advantages of USB ports that could be influencing her choice. (4 marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

QUESTION TWO (20 MARKS)

- a) State THREE types of computer ports and explain the type of cables connected to each port. (6 marks)
- b) After you have physically installed the hard disk and configured CMOS Setup to recognize it, the drive must still be prepared before it can store data. This process requires THREE steps listed below. Explain each of the steps below:
 - i. Low-level formatting (2 marks)
 - ii. Partitioning (2 marks)
 - iii. Logical Formatting. (2 marks)
- c) State and explain any THREE types of operating system installation types. (6 marks)
- d) State the unit used to measure each of the following:
 - i. Processor Speed. (1 mark)
 - ii. Memory Size. (1 mark)

QUESTION THREE (20 MARKS)

- a) Discuss TWO major differences between LINUX and Widows Operating Systems. (4 marks)
- b) State and explain any THREE types of hardware diagnostic tools. (6 marks)
- c) Explain the steps taken to implement a mobile hotspot on Windows 10. (5 marks)
- d) Explain the steps you would undertake in order to create a new disk partition on Windows 7. (5 marks)

QUESTION FOUR (20 MARKS)

- a) A student at Chuka University pursuing Diploma in Computer Science has approached you to advise on the purchase of a laptop. State and explain any FOUR factors that need to be considered when choosing a laptop. (4 marks)
- b) State and explain the SIX steps involved during the booting process. (6 marks)
- c) Explain the main difference between the Command Line Interface (CLI) and Graphical User Interface (GUI). (4 marks)
- d) State and explain the functions of any THREE MS-DOS commands that can be implemented through the MS Windows command prompt. (6 marks)

QUESTION FIVE (20 MARKS)

- a) State and explain the functions of THREE types of expansion slots. (6 marks)
- b) State any FOUR computer hardware maintenance practices. (4 marks)
- c) State and explain the THREE most popular disk interface standards used on PCs and server systems. State the advantages of each of the THREE standards. (6 marks)
- d) Audrey switched on her PC and noticed the message- "HDD failure:- being displayed before the machine could boot up properly. Explain the possible cause of this problem and its solution. (4 marks)