

The
Management
University
of Africa



Sponsored by the Kenya Institute of Management

CERTIFICATE UNIVERSITY EXAMINATIONS
SCHOOL OF SCIENCE AND TECHNOLOGY (SST)
CERTIFICATE IN BUSINESS INFORMATION
COMMUNICATION TECHNOLOGY/ CERTIFICATE IN
INFORMATION COMMUNICATION TECHNOLOGY

**CIT 100/CBT 100: BASIC CONCEPTS OF COMPUTER
OPERATING SYSTEMS**

DATE: 28TH JULY 2026

DURATION: 2 HOURS

**MAXIMUM
MARKS: 70**

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX [6]** questions.
4. Question **ONE** is compulsory.
5. Answer any other **FOUR** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **10 MARKS** each.
7. Write all your answers in the Examination answer booklet provided.

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

QUICKSERVE CYBER

Quick Serve Cyber is a small but growing business that offers computer and internet services to students, freelancers, and local entrepreneurs. The cyber recently upgraded its desktop computers to Windows 11 for better performance and installed Ubuntu Linux on its servers to improve file management and data security. The cyber also introduced Android tablets and smartphones to expand access to digital services such as online payments and mobile printing. To make daily operations more efficient, the manager decided to start using cloud storage for customer backups and document sharing. However, some users still save files on local drives and occasionally lose their work due to improper saving or sudden shutdowns. Others download files from unsafe websites, which sometimes introduces viruses and malware that slow down systems or corrupt data.

The staffs have also noticed that when customers open too many programs, computers slow down or freeze. The manager believes this is due to memory and storage limitations. Maintenance has become a major focus, as some computers run slowly because of dust accumulation, uninstalled updates, or unused files taking up space.

In addition to technical issues, the cyber faces challenges related to computer ethics and legal use. A few customers have been warned against accessing pirated content and copyrighted software. The management is planning to conduct basic training sessions to teach users about safe browsing, data protection, and ethical computing practices. The goal is to maintain reliable systems, protect user data, and provide a responsible digital environment.

Required:

- a) Describe two main functions of an operating system as shown in the case study.

[5 marks]

- b) Explain two possible reasons why computers at Quick Serve Cyber slow down when many programs are open.

[5 marks]

- c) Identify two maintenance practices that can help prevent performance problems in the computers.

[5 marks]

- d) Differentiate between primary memory and secondary storage using examples from the case.

[5 marks]

- e) Explain two ethical or legal issues that users in the cyber should avoid while using computers.

[5

marks]

- f) State and explain two advantages of using cloud storage for data backup and file sharing in the cyber.

[5 marks]

QUESTION TWO

- a) Explain any three basic functions of an operating system.

[6 marks]

- b) Examine two differences between Linux [open-source] and Windows [proprietary].

[4

marks]

QUESTION THREE

- a) Explain how virtualization can be applied in a learning environment.

[5 marks]

- b) Assess three advantages of using smartphones with modern operating systems in everyday life.

[5 marks]

QUESTION FOUR

- a) Evaluate two ways an operating system helps keep a computer secure.

[6 marks]

- b) Distinguish between process management and device management as done by an operating system.

[4 marks]

QUESTION FIVE

- a) Examine two basic maintenance practices that help keep computers running efficiently. **[4**

marks]

- b) Explain three signs that show a hardware component, such as the hard disk or RAM, may be failing.

[3 marks]

- c) Describe three ethical practices that computer users should follow when using computers in a shared environment such as a cyber café or school lab. **[3 marks]**

QUESTION SIX

- a) Describe the three main parts of the Central Processing Unit (CPU).

[2 marks]

- b) Explain four main functions of a computer in daily life applications. **[4**

marks]

- c) Evaluate any two major classifications of computers based on size or capability

[4 marks]