



UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

**FIRST YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

COMP 112: FUNDAMENTALS OF COMPUTING

STREAM: R

TIME: 2 HRS

DAY: THURSDAY [8.30 – 10.30 A.M]

DATE: 05/02/2026

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**SECTION A.****QUESTION ONE COMPULSORY (30 MARKS)**

You are hired as an IT assistant in a new company setting up its digital office. Staff will need to use computers for word processing, file storage, email, and online meetings.

- a) Explain the role of the basic components of a computer system (hardware and software) in supporting staff tasks. **(6 Marks)**
- b) Describe how an operating system manages file storage and retrieval to ensure efficient workflow. **(4 Marks)**
- c) Demonstrate with an example how word processing and spreadsheets can be combined for preparing a monthly report. **(6 Marks)**
- d) Interpret how cloud computing services (e.g., Google Drive, Dropbox) can enhance file accessibility and collaboration. **(4 Marks)**
- e) Evaluate how video conferencing tools improve communication in a hybrid workplace. **(4 Marks)**
- f) Discuss three basic cybersecurity practices that must be enforced to protect company data. **(6 Marks)**

SECTION B.**SECTION TWO CHOOSE ANY TWO QUESTIONS 40 MARKS. ALL QUESTIONS CARRY EQUAL MARKS (20 MARKS EACH)****QUESTION TWO (20 MARKS)**

A student is preparing a group assignment that requires writing, calculations, and presentation.

- a) Explain how to effectively use a word processor to prepare the written sections. **(6 Marks)**
- b) Interpret how spreadsheets can support calculations and data analysis. **(4 Marks)**
- c) Describe how to integrate presentation slides to summarize findings for group presentation day. **(6 Marks)**
- d) Evaluate the challenges of moving files between these applications and propose a solution. **(4 Marks)**

QUESTION THREE (20 MARKS)

An employee in a marketing firm depends heavily on the Internet and email.

- a) Discuss how search engines can be used to gather reliable information quickly. **(6 Marks)**
- b) Describe how to compose and send a professional email to a client, highlighting key etiquette. **(6 Marks)**
- c) Interpret how email attachments and cloud links can be used together to share large files. **(4 Marks)**
- d) Evaluate potential cybersecurity risks when using email and propose mitigation strategies. **(4 Marks)**

QUESTION FOUR (20 MARKS)

A non-profit organization is transitioning to cloud-based collaboration.

- a) Explain how cloud storage supports remote teamwork. **(6 Marks)**
- b) Describe how Google Docs/Sheets can be used collaboratively in real-time. **(4 Marks)**
- c) Interpret the difference between local backups and cloud backups in terms of security. **(4 Marks)**
- d) Evaluate limitations of cloud adoption in areas with poor Internet connectivity. **(6 Marks)**

QUESTION FIVE (20 MARKS)

A university is conducting online lectures for first-year students.

- a) Explain how to set up a Zoom or Google Meet session for a large class. **(6 Marks)**
- b) Discuss how screen-sharing and recording features can enhance teaching and learning. **(6 Marks)**
- c) Interpret possible cybersecurity threats (e.g., “Zoom bombing”) in online classes. **(4 Marks)**
- d) Propose measures to ensure secure and effective online learning. **(4 Marks)**