



GARISSA UNIVERSITY

UNIVERSITY EXAMINATION **2017/2018** ACADEMIC YEAR **ONE**
THIRD SEMESTER EXAMINATION

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCE

FOR THE CERTIFICATE OF INFORMATION TECHNOLOGY

COURSE CODE: CIT 103

COURSE TITLE: COMPUTER OPERATING SYSTEMS

EXAMINATION DURATION: 2 HOURS

DATE: 07/08/18

TIME: 200-4.00 PM

INSTRUCTION TO CANDIDATES

- The examination has **SIX (6)** questions
- Question **ONE (1)** is **COMPULSORY**
- Choose any other **THREE (3)** questions from the remaining **FIVE (5)** questions
- Use sketch diagrams to illustrate your answer whenever necessary
- Do not carry mobile phones or any other written materials in examination room
- Do not write on this paper

This paper consists of **TWO (2)** printed pages

please turn over



QUESTION ONE (COMPULSORY)

- a) Define the term process control block(PCB) [1 mark]
- b) Discuss three possible causes for a process termination [3 Marks]
- c) Outline and discuss the components of PCB [16 Marks]
- d) Discuss the states of a process [10 Marks]

QUESTION TWO

- a) Define the term computer booting [1 mark]
- b) Differentiate between warm booting and cold booting [4 Marks]
- c) Outline and describe types of process scheduling [6 Marks]
- d) Outline four objectives of process scheduling [4 Marks]

QUESTION THREE

- a) Define the term operating systems [1 mark]
- b) Discuss the types of operating system [8 Marks]
- c) Outline and elaborate two functions of the operating system [4 marks]
- d) List two examples of operating system in the market today [2 Marks]

QUESTION FOUR

- a) Discuss the term threading [1 mark]
- b) Outline and expound the types of threading [4 marks]
- c) Differentiate between a process and a thread [10 Marks]

QUESTION FIVE

- a) Express the term Deadlock [1 Mark]
- b) Outline and explain four conditions that can result to a deadlock [8 marks]
- c) State and expound on the methods of handling a deadlock [6 marks]

QUESTION SIX

- a)
 - i. What to the abbreviation GUI stand for?
 - ii. State its meaning [2 marks]
- b) Differentiate between CUL operating systems and GUI operating system. List examples of each [4 Marks]
- c) Outline and expound on the features of the Linux operating system [8 Marks]

