

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF CERTIFICATE
IN COMPUTER SCIENCE

COSC 00190: INTRODUCTION TO COMPUTER SYSTEMS PROJECT

STREAMS: CERT. COMP. SCI

TIME: 2 HOURS

DAY/DATE: THURSDAY 11/4/2019

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- Answer question **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 in this section)

QUESTION ONE (30 Marks)

- Briefly discuss the role of each of the following parts of a project proposal
 - Title page (2 marks)
 - Abstract (2 marks)
 - Problem statement (2 marks)
 - Project timeline (2 marks)
- Name any three project management tools used by project managers (3 marks)
- List any two types of project plans (2 marks)
- State three factors that determine the assignment of staff to tasks during software development. (3 marks)
- Name any three attributes of a system project (3 marks)
- Differentiate between a vertical and horizontal prototype (4 marks)
- Name any three types of reports (3 marks)

- h. Differentiate between software verification and software validation (4 marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

QUESTION TWO (20 MARKS)

- a. Discuss software testing under the following levels

i. System Testing (3 marks)

ii. Regression Testing (3 marks)

iii. Usability Testing (3 marks)

iv. Portability Testing (3 marks)

- b. Discuss the advantages of using the software prototyping development model (8 marks)

QUESTION THREE (20MARKS)

- a. State and explain four components of a user manual document (10 marks)
b. Discuss the role played by the members of the software development (10 marks)

QUESTION FOUR (20MARKS)

- a. With the aid of a diagram discuss the waterfall development mode (12 marks)
b. State and explain four software risks associated with the software development process

(8 marks)

QUESTION FIVE

- a. List and briefly describe FIVE types of reports. (10 marks)
b. discuss the purpose of a viva voce assessment (6 marks)
c. differentiate between alpha and beta testing (4 marks)

