

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

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

**COSC 00190: INTRODUCTION TO COMPUTER SYSTEMS PROJECT**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE:.....**

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**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)**

- List three Advantages of Using a Formal Project Management approach (3marks)
- List any three characteristics of a software project (3marks)
- Differentiate between project deliverables and milestones (4marks)
- Briefly discuss the role of each of the following parts of a project proposal
  - Title page (2marks)
  - Abstract (2marks)
  - Problem statement (2marks)
  - Project timeline (2marks)
- Name the three stages where testing taking place in the software development life cycle (3marks)
- What is the role of SRC in the SDLC (2marks)

- g. Explain how the following risks affect a project (4marks)
- i. Staff turnover
  - ii. Management change
- h. You have been hired as part of a software development team and you are expected to help in choosing the appropriate development methodology for a time critical project. Explain two appropriate methodologies for this project for your team to choose from (3marks)

### **SECTION B (Answer any TWO questions)**

#### **QUESTION TWO (20MARKS)**

- a. With the aid of a diagram discuss the triple constraint concept as applied in project management (10marks)
- b. Explain how the following risks affects a project
- i. Management change (3marks)
  - ii. Hardware unavailability (3marks)
  - iii. Staff turnover (2marks)
  - iv. Product competition (2marks)

#### **QUESTION THREE (20MARKS)**

- a. Discuss software testing under the following levels
- i. System Testing (3marks)
  - ii. Regression Testing (3marks)
  - iii. Usability Testing (3marks)
  - iv. Portability Testing (3marks)
- b. Discuss the advantages of using the software prototyping development model (8marks)

#### **QUESTION FOUR (20MARKS)**

- a. Discuss how the following software tools and techniques help project managers in performing their duties (12marks)
- i. Project Charter
  - ii. Gantt charts
  - iii. WBS document
- b. State and explain FOUR components of a systems project report (8 Marks)

#### **QUESTION FIVE (20MARKS)**

- a. Briefly describe seven guidelines that must be followed while conducting a Viva Voce assessment. (14marks)
- b. List and briefly describe THREE types of reports. (6marks)

