

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

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

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

**STREAMS: CERT Y1S2**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 13/04/2023**

**8.30 A.M. –10.30 A.M.**

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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)**

- a. State the role of the following tools in the software development process
  - i. Debugger (2 marks)
  - ii. Compiler (2 marks)
  - iii. Interpreter (2 marks)
- b. Differentiate between functional and nonfunctional requirements (4 marks)
- c. List the four steps involved in the risk management process (4 marks)
- d. Differentiate between project milestones and project deliverables (4 marks)
- e. List three advantages of using the formal project management approach (3 marks)
- f. State any three attributes of a project (3 marks)
- g. What is the role of each of the following parts of a user manual document?

- i. Cover page (2 marks)
- ii. Table of contents (2 marks)
- h. What is the role of SRC in the SDLC (2 marks)

**SECTION B**

**QUESTION TWO (20 MARKS)**

- a. With the use of a diagram discuss the risk management process (12 marks)
- b. Discuss the role played by the members of the software development (8 marks)

**QUESTION THREE (20 MARKS)**

- a. 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. With reasons, explain two appropriate methodologies for this project for your team to choose from. (12marks)
- b. List and briefly describe THREE types of reports. (6 marks)
- c. state any three software risk associated with the software development process (2 marks)

**QUESTION FOUR (20MARKS)**

- a. Discuss how the following software tools and techniques help project managers in performing their duties
  - i. Project Charter (4 marks)
  - ii. Earned value management (3 marks)
  - iii. Gantt charts (3 marks)
- b. Explain the characteristics of a well-written computer project report (10 Marks)

**QUESTION FIVE (20MARKS)**

- a. Briefly describe seven guidelines that must be followed while conducting a Viva Voce assessment. (14 marks)
- b. Briefly discuss the role of each of the following parts of a project proposal
  - i. Abstract (2 marks)
  - ii. Project timeline (2 marks)
  - iii. Scope (2 marks)