CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

CHUKA AND THARAKA CAMPUSES

FIRST YEAR EXAMINATION FOR THE AWARD OFCERTIFICATE IN COMPUTER SCIENCE

COSC 00190: INTRODUCTION TO COMPUTER SYSTEMS PROJECT

STREAMS: CERT. COMP. SCI.   **TIME: 2 HOURS**

DAY/DATE: FRIDAY 07/12/2018   **11.30 A.M – 1.30 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)

a. Explain how the following project plans support the main software project
i.   Quality plan   (2marks)
ii.   Validation plan   (2marks)
iii.   Configuration management plan   (2marks)
b. Discuss software testing under the following levels
     i.   Unit testing   (4marks)
     ii.   Validation testing   (4marks)
c. Differentiate between the following terms as sued in project management
    Milestones and deliverables   (4marks)

d. What are the character traits of a leader in a strong project matrix   (3marks)
e. Differentiate between functional and non-functional requirements   (4marks)
f. state any three software risk associated with the software development process(3marks)
g. State any two attributes of a system project   (2marks)

SECTION B (Answer any TWO questions)

QUESTION TWO (20MARKS)

   a. With the aid of a diagram discuss the risk management process   (12marks)
   b. Discuss any four scenarios why the waterfall software development model can be
      applied   (8marks)

QUESTION THREE (20MARKS)

a. Discuss the role played by a project manager in the software development process.(10marks)
b. Discuss how the following software tools and techniques help project managers in
   performing their duties   (10 marks)
      i.   Project Charter
      ii.   Earned value management
      iii. Gantt charts

QUESTION FOUR (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)

QUESTION FIVE (20MARKS)

   a. State and explain FOUR components of a user manual document   (8 Marks)
   b. Discuss software testing under the following levels
         i.   Unit testing   (4marks)
         ii.   Integration testing   (4marks)
         iii. Acceptance testing   (4marks)