CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATIONS FOR THE AWARD OF BACHELOR OF SCIENCE IN APPLIED COMPUTER SCIENCE

ACSC 101: INTRODUCTION TO INFORMATION TECHNOLOGY

STREAMS: APPLIED COMP SCIENCE Y1S1   **TIME: 2 HOURS**

DAY/TIME: FRIDAY 8/12/2017   **8.30 A.M – 10.30 A.M**

INSTRUCTIONS:
- **Answer QUESTION ONE and any other TWO questions.**
- **This is a CLOSED BOOK exam. No reference materials are allowed in the exam room.**
- **No mobile phone allowed in the exam room** *(make sure to switch it off and leave it with the invigilator if you carried one).*
- **Write your answers legibly and use your time wisely**

SECTION A (COMPULSORY)

Question One (Compulsory) (30 marks)

a) Discuss the instruction-execution cycle.   [6 marks]
b) Outline the characteristics of primary memory.   [4 marks]
c) Describe the CPU and the functions of each part of the CPU.   [3 marks]
d) Distinguish between *system software* and *application software.*   [2 marks]
e) Discuss the impacts of social networks in the Kenyan society.   [4 marks]
f) Describe the relationship between computer software and hardware. Make use of a well labeled diagram.   [5 marks]
g) What are the various implementations of cloud computing.   [6 Marks]

SECTION B (Answer any TWO questions from this section)

Question Two (20 marks)

a) What are the functions of IT.   [6 Marks]
b) Discuss the different types of Information Systems.   [8 Marks]
c) Discuss the type of commands in a UNIX system.   [6 marks]

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Question Three (20 marks)

a) Discuss the type of constraints that should be enforced in a database. [6 marks]
b) Discuss 3 ethical issues posed by IT. [6 marks]
c) Compare between the layered models in network communication. [6 marks]
d) Differentiate between icons and folders. [2 marks]

Question Four (20 marks)

a) Discuss automation and how it has revolutionalized the world. [6 marks]
b) Briefly describe any three popular DBMS. [6 marks]
c) Discuss the common application software in an office and their merits. [8 Marks]

Question Five (20 marks)

a) Distinguish between various data processing models. [6 marks]
b) Discuss any three types of information systems. [6 marks]
c) Describe how computer hardware represents data. [4 marks]
d) Explain the different acquisition schemes for software. [4 marks]