ALUPE UNIVERSITY COLLEGE

...Bastion of Knowledge....

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OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2020 /2021 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER REGULAR EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)

COURSE CODE: COM 110 / MSE 101

COURSE TITLE: INTRODUCTION TO COMPUTERS AND COMPUTING

DATE: 19/02/2021 **TIME: 0900 – 1200 HRS**

INSTRUCTION TO CANDIDATES

- **SEE INSIDE**

THIS PAPER CONSISTS OF 3 PRINTED PAGES
PLEASE TURN OVER

STREAM: BSc (Computer Science)   **DURATION: 3 Hours**

INSTRUCTIONS TO CANDIDATES

i.   *Answer ALL questions from section A and any THREE from section B.*

ii.   *Maps and diagrams should be used whenever they serve to illustrate the answer.*

iii. *Do not write on the question paper.*

SECTION A (24 MARKS) COMPULSORY

QUESTION ONE [12 MARKS]

a) In relation to operating systems, explain: [3 Marks]

     i.   Operating system

     ii.   Booting

     iii. Cold boot

b) Outline four factors to consider when buying a computer.   [4 Marks]

c) Explain the key characteristics that distinguish each of the five computer

     generations.   [5 Marks]

QUESTION TWO [12 MARKS]

a) What is a secondary storage device?   [2 Marks]

b) Explain the various computers that fall into Microcomputer category. [4 Marks]

c) Discuss the different components that make up the Central processing   [6 Marks]
     unit.

SECTION B [36 Marks] Answer any THREE questions]

QUESTION THREE [12 MARKS]

a) Referring to computer application software:

     i.   Define the term 'application software'   [2 Marks]

     ii.   Identify and explain any three application software that are [3 Marks]
        commonly used in educational institutions today.

b) Identify and explain three functions of operating systems.   [4 Marks]

c) Give any three examples of Development Programs briefly explaining

     their application.   [3 Marks]

QUESTION FOUR [12 MARKS]

    a) State four reasons that make computer networks crucial in an organization. [4 Marks]

    b) Differentiate between Local Area Network and Wide Area Network [4 Marks]

    with respect to their usage.

    c) Explain the trend in the computer technology revolution. [4 Marks]

QUESTION FIVE [12 MARKS]

    a) Describe RAM, and explain its importance in computers. [4 marks]

    b) With the aid of a diagram, describe the functions of main units of the

    Central Processing Unit (CPU) and outline their functions. [6 Marks]

    c) In today's world, computers are essential in various applications and [2 Marks]

    processes. List two uses of computers in the world today.

QUESTION SIX [12 MARKS]

    a) Briefly discuss what are peripherals and indicate the examples [4 Marks]

    b) System software is classified into various sub-classes. State and briefly

    describe two subclasses of system software, giving appropriate examples. [4 Marks].

    c) In buying computers, there are some factors you will need to consider. Explain any five such factors. [4 Marks]

QUESTION SEVEN [12 MARKS]

a) Identify and explain any four sources of security threats to computer

systems. [4 Marks]

b) Describe three mechanisms that can be applied to protect computer

systems. [3 Marks]

c) With a diagram, demonstrate an architecture that clearly highlights the
   of computer organization, and describe the various parts and their
   importance. [5 Marks]

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