KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF THE DIPLOMA IN CLINICAL MEDICINE AND SURGERY/SASS/SOBE THIRD SEMESTER 2022/2023 [MAY-AUGUST, 2023]

COMP 0190/COMP 0100: INTRODUCTION TO COMPUTER APPLICATIONS/SYSTEMS/FUNDAMENTALS/INFORMATION TECHNOLOGY AND NATIONAL DEVELOPMENT

STREAM: Y1S3   **TIME: 2 HOURS**

DAY: THURSDAY, 9:00 – 12:00 PM   **DATE: 27/07/2023**

INSTRUCTIONS
1. *Do not write anything on this question paper.*
2. *Answer question ONE (compulsory) and any other TWO questions in section B.*

SECTION A

QUESTION ONE

a) Explain specific applications of Computers in Clinical Medicine or Public Administration.   (8 marks)
b) Distinguish between RAM and ROM.   (2marks)
c) Explain the role of the internet in globalization   (2 marks)
d) Information Technology has become a powerful tool for National Development. Explain.   (8 marks)
e) The ability to utilize technology to drive new ways of doing businesses is a major factor in how an organization moves forward and succeeds. Explain the following Information Technology (IT) issues that continue to present hurdles:
    i.   Cybersecurity Threats.   (2marks)
    ii. Operationalizing Artificial Intelligence.   (2marks)
    iii. Data Protection and Privacy.   (2marks)
    iv. Social Media.   (2marks)
    v.   Creating a hybrid work environment that works for everyone. (2mks)

SECTION B

QUESTION TWO

a) Define what is data backup, causes of data loss and explain reasons why it is important to backup. (8marks)

b) State four roles of information systems to organizations. (4marks)

c) Explain what an Operating system is and four functions of the operating system. (8 marks)

QUESTION THREE

a) A series of breakthroughs have occurred in the computing world since the 1940's. Distinguish between the following computers:

    i. Fourth Generation and Fifth generation computers. (2marks)

    ii. Super computers and Personal computers (2marks)

    iii. Digital and Analog computers. (2marks)

    iv. General and specific purpose computers (2marks)

b) Define computer ergonomics and describe its relevance to users. (6marks)

c) Explain Microsoft Word and PowerPoint and instances where they are used. (6marks)

QUESTION FOUR

a) Explain National Development and Four Key Aspects. (9 marks)

b) Explain five factors you will consider when purchasing computers for the company. (5 marks)

c) Explain your understanding of the following contemporary Information technology issues:

    i.   Cyberbullying (2marks)

    ii. Hacking (2marks)

    iii. Digital divide (2marks)

QUESTION FIVE

a) Outline four benefits of Computer networks (4marks)

b) Given an Excel sheet with data in the cells B1, B2, B3, B4 and B5.

    i.   In cell B6, write a function to find the sum of the five cells. [2 marks]

    ii. In another cell B7, write a formula to find the average of the five cells. [2 marks]

c) Explain your understanding of computer databases and explain why they are important in the modern world. (6marks)

d) Explain What the CPU is and its Components and their functions. (6marks)