CHUKA **UNIVERSITY**

UNIVERSITY EXAMINATIONS

CHUKA / EMBU

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

COSC 00102 : INTRODUCTION TO COMPUTER APPLICATIONS

STREAMS: CERT COMP SCI. Y1S1

TIME: 2 HOURS

DAY/DATE: THURSDAY 17/12/2020   **8.30 AM – 10.30AM**

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. Define the following terms as used in computing
   - i.   Input   (2marks)
   - ii. Processing   (2marks)
   - iii. Computer   (2marks)

   b. Define the term workbook as used in spreadsheet programs.   (2 marks)

   c. Define the term antivirus   (2marks)
   d. Faith, a computer technician at Faida Technical Training Institute, would like to prepare a report detailing quantities of equipment in the laboratory using charts. Outline two application programs that she would use to achieve her objective.   (2 marks)

e. Nicholson, a computer student, intends to send an email to his friend. Outline two email applications that he would use to achieve his objective. (2 marks)

f. State three advantages associated with the use of computers (3marks)

g. The Internet has many services which it can offer including telnet. Describe the purpose of this service to users. (3marks)

h. What is the procedure of performing the following actions in Microsoft word?
    i.   Inserting page numbers (3marks)
    ii.
    iii. Bolding text (3marks)

i. Differentiate between LAN and MAN (4marks)

SECTION B (Answer any TWO questions)
QUESTION TWO (20MARKS)
a. Discuss the application of computers in the following sectors (10marks)
    i.   industries
    ii. hospitals
    iii. hotel management
    iv. Security
    v.   Weather forecasting

b. Discuss any Five functions of the operating systems (10marks)

QUESTION THREE (20MARKS)
   a. Explain any five limitations of traditional file processing systems that have necessitated a database approach (10marks)

   b. An upcoming organization uses a lot of files in keeping records; the organization wants to break down the paperwork and automate the basic routine jobs by interconnecting computers in the organization. What will be the business benefits of networking this organization? (10marks)

QUESTION FOUR (20MARKS)
   a. Differentiate between application and system software. Give two examples for each
(8marks)
   b. What is a network topology? Describe any three types of topologies with a suitable diagram (12marks)

QUESTION FIVE (20MARKS)

a. Describe how computer hardware devices are categorized [4 marks]

b. You are interested in purchasing of a notebook and you manage to come across an advertisement with the following specifications.

c. **Get notebook! Get notebook**

Acer Notebook

Features include:

Intel Celeron 2.8 GHz, 2 Gigabyte, 1 Terabyte,

COMBO DVD , 56K, Wifi, touchpad, Red hat Linux.

Required:

i. What operating system does the above notebook use? [2 marks]

ii. Which hardware component does 2 Gigabyte refer to? [2Marks]

iii. Which hardware component does 1 Terabyte refer to? [2 Marks]

iv. What does this notebook use to connect to a network? [2 Marks]

d. Differentiate between a field and a record (2marks)

e. List Four characteristics of primary memory (4marks)

f. List two functions of the ALU (2marks)

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