



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR FIRST TERM EXAMINATION FOR

DIPLOMA IN BUILDING TECHNOLOGY

DIPLOMA IN CIVIL ENGINEERING

INFORMATION COMMUNICATION TECHNOLOGY

DATE: 11/6/2021

TIME: 8.30-11.30 AM

INSTRUCTIONS

Answer any five questions

QUESTION ONE (20 MARKS)

- a) Explain the following terms as used in electronic data processing (EDP), giving any two suitable examples in each case:
- i. Data;
 - ii. Data processing;
 - iii. Information. (10 marks)
- b) Highlight six advantages and four disadvantages of using computers. (10 marks)

QUESTION TWO (20 MARKS)

- a) List two examples of each of the following computer peripheral devices:
- i. Input device;
 - ii. Output device;
 - iii. Secondary storage media;
 - iv. Secondary storage device. (4 marks)
- b) Draw a well labelled block diagram of a digital computer system clearly showing the hardware components and their relationships. (10 marks)
- c) List two examples of input devices under the following categories (6 marks)
- i. Pointing devices
 - ii. Scanning devices

- iii. Voice recognition devices

QUESTION THREE (20 MARKS)

- a) Name four types of menus as used in computer systems, and state how each menu is accessed. (8 marks)
- b) Differentiate between the following keys on the computer keyboard with respect to their use.
 - i. Shift and Caps Lock.
 - ii. Delete and Backspace.
 - iii. Home and End. (12 marks)

QUESTION FOUR (20 MARKS)

- a) Name two computer application packages currently in the market in the following categories:
 - i. word processing;
 - ii. spreadsheet;
 - iii. desktop publishing;
 - iv. database management. (4 marks)
- b) Write the following abbreviations in full with respect to storage in computer systems:
 - i. FDD;
 - ii. HDD;
 - iii. CD;
 - iv. DVD. (4 marks)
- c) Name two types of computer mice currently available in the market. (4 marks)
- d) Describe three computer peripherals. (6 marks)
- e) Complete the following dashes.
 - i. 1 KB = _____ Bytes (1 mark)
 - ii. 1 MB = _____ KB (1 mark)

QUESTION FIVE (20 MARKS)

- a) Outline two functions of the control unit in a computer system. (2 marks)
- b) State two examples of utility software used in computers systems. (2 marks)
- c) State two functions of each of the following computer devices.
 - i. Input (2 marks)
 - ii. Output (2 marks)
 - iii. ALU (2 marks)
- d) Distinguish between the following pairs of ICT terms.
 - i. Computer hardware and computer software. (2 marks)
 - ii. Primary memory and Secondary memory (2 marks)

- iii. Data and information (2 marks)
- iv. Application software and System software (2 marks)
- v. ALU and control unit (2 marks)

QUESTION SIX (20 MARKS)

- a) Explain two ways in which computers are used in engineering industry. (4 marks)
- b) Sanglinda would like to procure an operating system for her computer system. Outline to her two factors other than cost that she should consider. (2 marks)
- c) Classify the following as either hardware or software. (2 marks)
Xenix, DBMS, Track ball, Libre Office Writer
- d) Define the term Word Processing software. (2 marks)
- e) State four advantages of computerization (4 marks)
- f) Describe the following types of computers
 - i. Mainframe computers
 - ii. Minicomputers
 - iii. Microcomputers (6 marks)

QUESTION SEVEN (20 MARKS)

- a) State two disadvantages of computerization (2 marks)
- b) State two types of the internal memory (2 marks)
- c) Identify four computers as classified by Development/Age (4 marks)
- d) Explain three reasons why a mobile phone is regarded as a computer (6 marks)
- e) Explain three main functions of computer hardware. (6 marks)