



MACHAKOS UNIVERSITY

University Examinations 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY
FIRST YEAR FIRST SEMESTER EXAMINATION FOR
DIPLOMA IN BUILDING TECHNOLOGY
DIPLOMA IN CIVIL ENGINEERING
INFORMATION COMMUNICATION TECHNOLOGY

Date: /12/2021

Time: 3 HOURS

INSTRUCTIONS

Answer any five questions

QUESTION ONE (20 MARKS)

- a) Define the following terms;
 - i. Information Communication Technology. (2 marks)
 - ii. Computer system. (2 marks)
 - iii. Operating system. (1 mark)
- b) Identify three examples of application packages. (3 marks)
- c) Differentiate primary memory from secondary memory (4 marks)
- d) Explain how the following keyboard keys are used. (2 marks)
 - i. Backspace
 - ii. Tab
- e) Describe two mouse operations. (2 marks)
- f) Citing two examples, explain the term computer peripherals. (4 marks)

QUESTION TWO (20 MARKS)

- a) State four factors to consider when acquiring computer software (4 marks)
- b) Differentiate between the following pairs of terms as used in ICT.
 - i. Data and information (2 marks)
 - ii. Application software and System software (2 marks)
 - iii. ALU and control unit (2 marks)
- c) Explain four ways of upholding data security in an organization's computer center. (4 marks)
- d) Explain three applications of computers in the engineering industry. (6 marks)

QUESTION THREE (20 MARKS)

- a) Define the following terms as applied in computer systems;
 - i. liveware (2 marks)
 - ii. data processing. (2 marks)
- b) Explain two components of the C.P.U. (4 marks)
- c) Differentiate between the following pairs of terms as used in computers. (4 marks)
 - i. Soft copy and Hard copy
 - ii. Cold boot and warm boot
- d) Describe the following types of computers (6 marks)
 - i. Mainframe computers
 - ii. Minicomputers
 - iii. Microcomputers
- e) Identify two components of a window. (2 marks)

QUESTION FOUR (20 MARKS)

- a) Define the term Word Processing software. (2 marks)
- b) State two word processing software found in the market today. (2 marks)
- c) Outline two word processing application areas. (2 marks)
- d) Explain four advantages of computerization. (4 Marks)
- e) Describe two safety precautions to be observed in a computer laboratory. (4 marks)
- f) Describe three ways in which computers are classified. (6 marks)

QUESTION FIVE (20 MARKS)

- a) Identify three mouse techniques/skills. (3 marks)
- b) State two circumstances that would lead to warm booting. (2 marks)

- c) Outline three factors to consider while purchasing an operating system. (3 marks)
- d) Explain two challenges associated with widespread use of ICT in society. (4 Marks)
- e) Describe the features of the first generations computers. (4 marks)
- f) Charles wants to purchase a computer for her personal use. State four reasons, why you would encourage him to buy a laptop. (4 marks)

QUESTION SIX (20 MARKS)

- a) Identify two application areas where super computers can be used. (2 marks)
- b) Outline four characteristics of the third generation computers. (4 marks)
- c) Explain the term, electronic mail (e-mail). (2 marks)
- d) Eric is an architect and would like to procure a plotter for his architectural and computer aided design works. State two factors he should consider. (2 marks)
- e) You have been requested to advice your manager on different types of computer software. Explain, giving examples, the two broad classes of software. (4 marks)
- f) Differentiate between the following ICT terms.
 - i. optical disk and magnetic Disk (2 marks)
 - ii. analog computer and digital computer (2 marks)
 - iii. hard disk and compact disk (2 marks)

QUESTION SEVEN (20 MARKS)

- a) Outline the major features of the fourth generation computers. (4 marks)
- b) Describe two threats to computer systems. (2 marks)
- c) Write the following abbreviations in full with respect to storage in computer systems: (4 marks)
 - i. HDD
 - ii. DVD
 - iii. FDD
 - iv. USB
- d) With aid of a block diagram, explain the functional components of a digital computer system. (10 marks)