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 INFORMATION COMMUNICATION TECHNOLOGY

2920/101: INTRODUCTION TO ICT AND ETHICS

DATE: **TIME:**

INSTRUCTIONS

Answer any five questions

QUESTION ONE (20 MARKS)

a) Define the following terms;

   i. Computer system. (2 marks)

   ii. Operating system. (2 mark)

b) Identify two examples of application packages. (2 marks)

c) Distinguish primary memory from secondary memory. (4 marks)

d) Explain how the following computer keyboard keys are used. (2 marks)

   i. Backspace

   ii. Space bar

e) Describe two mouse operations. (2 marks)

f) Citing two examples, explain the term computer peripherals. (4 marks)

g) Explain two negative impacts of ICT in a society. (2 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) Describe two word processing application areas. (2 marks)

d) Explain four advantages of computerization. (4 marks)

e) Explain two precautions that should be undertaken in a computer laboratory to guarantee the safety of computers. (4 marks)

f) Describe three ways in which computers are classified. (6 marks)

QUESTION FIVE (20 MARKS)

a) State two circumstances that would lead to warm booting. (2 marks)

b) Identify four examples of utility software as used in computers. (2 marks)

c) Distinguish a scanner from a printer. (2 marks)

d) Explain the importance of the operating system in a computer system. (2 marks)

e) Explain two challenges associated with widespread use of ICT in society. (4 marks)

f) Describe the features of the first generations computers. (4 marks)

g) 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 features of a third generation computer. (4 marks)

c) Explain the meaning of 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. special-purpose computer and dedicated computer (2 marks)

iii. Flash 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)