



MACHAKOS UNIVERSITY

University Examinations for 2019/2020

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR THIRD SEMESTER EXAMINATION FOR

DIPLOMA IN FOOD AND BEVERAGE

FASHION DESIGN

ELECTRICAL AND ELECTRONICS ENGINEERING

AUTOMOTIVE ENGINEERING

CIVIL ENGINEERING

MECHANICAL ENGINEERING

BUILDING TECHNOLOGY

2601/101/ICT: INFORMATION COMMUNICATION TECHNOLOGY

DATE: 17/12/2020

TIME: 11:30-2:30 PM

INSTRUCTIONS

Answer ANY FIVE questions

Don't write on this question paper

QUESTION ONE

- a) Describe the following types of computers
 - i. Super computers (2 marks)
 - ii. Minicomputers (2 marks)
 - iii. Microcomputers (2 marks)
- b) Illustrate and briefly describe the information processing cycle (6 marks)
- c) Explain **any four** configuration specification to consider when acquiring a computer system. (8 marks)

QUESTION TWO

- a) State a single mouse technique that would be applied in each of the following cases
- Opening a Microsoft word file
 - Moving a file from folder a to folder b
 - Drawing a rectangular shape
 - Selecting a command. (8 marks)
- b) Outline two requirements for one to access the World Wide Web. (2 marks)
- c) Explain four negative impacts of computers in the society. (8 marks)
- d) George applied section breaks when working on a word processing document. Explain two functions of this feature. (2 marks)

QUESTION THREE

- a) Explain two roles played by I.C.T in a learning institution. (4 marks)
- b) Outline the computers classified according to technology (2 marks)
- c) Outline **two** limitations of sound output. (2 marks)
- d) Machakos University has automated most of its operations. Describe three benefits derived from this move. (6 marks)
- e) Juma who is a student in MksU intends to buy a laptop and has approached you for advice. Explain to him **three** factors that will determine the cost of the laptop. (6 marks)

QUESTION FOUR

Table 1 shows an extract of a spreadsheet program used by Jurupa college. Use it to answer the questions that follow.

	A	B	C	D	E	F	G	H
1	STUDENT NAME	QT	PROG	APP	SAD	TOTAL	MEAN MARK	GRADE
2	Joan	50	85	65	23			
3	Zipporah	87	45	23	43			
4	Kiongera	45	67	43	23			
5	Shabeth	29	23	12	56			
6	Ledama	84	78	56	76			
7	Masibo	74	45	87	86			
8	Kamau	68	23	98	75			
9	Wekesa	58	56	56	56			

- a) Suppose the college intends to count the number of subjects a student has passed. Write a formula that if entered in cell G2 would calculate the number of subjects given that the pass mark is 60. (4 marks)
- b) Write the formula in the appropriate cell that could be used to compute:
- The mean mark for Shabeth.
 - The total mark for Masibo.
 - Highest mark in QT
 - Lowest mark Ledama. (8 marks)
- c) Write the formula to calculate the grade for each student given:
- <40 FAIL
- >=40 PASS. (4 marks)
- d) Differentiate between relative and mixed referencing as used in spread sheets. (4 marks)

QUESTION FIVE

- a) State **any two** categories of input devices giving an example in each case. (4 marks)
- b) Explain the **two** types of primary storage/memory. (4 marks)
- c) Describe the main components of the central processing unit. (8 marks)
- d) State three disadvantages of computerization (4marks)

QUESTION SIX

- a) Describe three types of network topologies. (6 marks)
- b) Giving an example in each case, Differentiate between optical and magnetic media as used in secondary storage devices. (8 marks)
- c) Describe three functions of operating system (6 marks)

QUESTION SEVEN

- a) Giving two examples in each case, differentiate between Soft copy output and Hard copy output in relation to computers (8 marks)
- b) Explain the term ICT as used in computers (2 marks)
- c) Giving two examples in each case, describe the two types of application software. (6 marks)
- d) State four forms into which the computer can input, process and output data (4 marks)

QUESTION EIGHT

- a) Explain each of the following terms as used in computer software:
 - i. Compatibility;
 - ii. Portability. (4 marks)
- b) An export company has decided to computerize their operations; they have decided to buy computer packages instead of developing their programs. Describe **three** benefits they are going to realize from their decision. (6 marks)
- c) Describe the term *computer/information security*. (2 marks)
- d) Describe four basic principles/concerns of data/information/computer security. (8 marks)