



MACHAKOS UNIVERSITY

University Examinations for 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING

DIPLOMA IN AUTOMOTIVE ENGINEERING

DIPLOMA IN MECHANICAL ENGINEERING

DIPLOMA IN FOOD AND BEVERAGE

DIPLOMA IN CIVIL ENGINEERING

DIPLOMA IN SOCIAL WORK

2503/101: INFORMATION COMMUNICATION TECHNOLOGY

DATE: 23/4/2019

TIME: 2.30-5.30 PM

INSTRUCTIONS

1. Answer **Any five (5)** questions
2. All the questions carry twenty (20) marks each
3. This paper consists of FIVE (5) printed pages

QUESTION ONE (20 MARKS)

- a) A college student who had paid full fees for the semester received his computer printed fees statement, and on observing it, he realised that it showed that he still had a balance of Ksh 2000. When he approached the finance officer for clarification, he was told that it was a computer error. As a computer expert, account for this phenomenon. (4 marks)
- b) Given a personal computer system with the following secondary storage drive configuration:

One internal DVD-RW drive.

No floppy disk drive.

One external DVD-RW drive connected to the system.

One USB flash memory connected to the system.

One internal HDD drive with no partitioning.

One memory card inserted into the system.

Outline the letter names which would automatically be assigned to the storage drives for the PC described above. For removable drives, assume they were connected in the same order as in the list above. (6 marks)

- c) List any **four** input/output devices used on an Automated Teller Machine. (4 marks)
- d) You have been requested to advise your manager on different computer Software, briefly explain, giving examples, the **two** classes of software. (4 marks)
- e) Outline **four** uses of the internet. (2 marks)

QUESTION TWO (20 MARKS)

- a) Name any *two* word processing software and any *two* spreadsheet software currently in the market. (2 marks)
- b) Figure 1 show typical features used in word processing programs. State the function of each of the features labeled (i) and (ii). (4 marks)

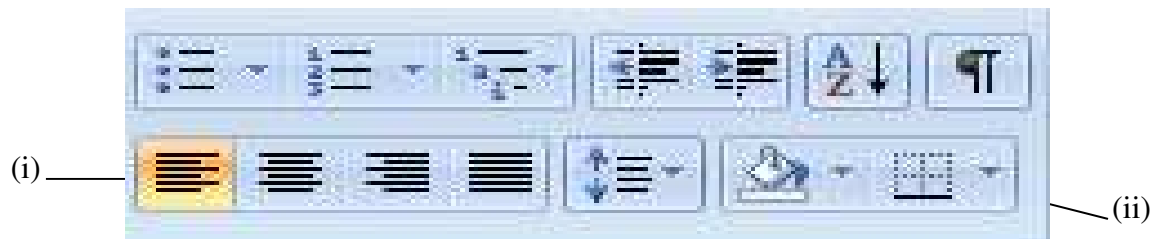


Figure 1

- c) Differentiate between the following features or commands as used in document creation:
 - i. Save and Save As;
 - ii. Header and Footer;
 - iii. Portrait and Landscape orientation;
 - iv. Superscript and Subscript;
 - v. Merge to New Document and Merge to Printer. (10 marks)
- d) In word processing, *indent* means moving the text away from the margin. Describe **two** types of indents. (4 marks)

QUESTION THREE (20 MARKS)

- a) Briefly explain the importance of computer security. (2 marks)
- b) Differentiate between an attack and a threat, giving an example in each case. (4 marks)
- c) Fire by itself is a real problem to information systems. Outline three reasons why it is classified as a serious security threat. (6 marks)
- d) Outline *two* counter measures against;
- i. Computer viruses
 - ii. Unauthorized access.
 - iii. Piracy
 - iv. Fraud
- (8 marks)

QUESTION FOUR (20 MARKS)

- a) The table below was prepared by a word processing program; identify four formatting features used to on it. (4 marks)

BAOBI PARK					
GAP ANALYSIS PROGRAMME					
30th and 31st March 2014					
DAY	8:30 – 10:00	HB	10:30 – 12:00	HB	2:00 -4:00
Friday	Presentation		Group Work		Group Work
Saturday	Plenary		Group Work		Plenary

- b) A student from MksU wants to create a folder on the desktop to store the above table, state the procedure he/she would use. (4 marks)
- c) Briefly explain the following word processing features:
- i. Find and Replace;
 - ii. Thesaurus;
 - iii. Autocorrect.
- (6 marks)
- d) Imagine you are a computer consultant, a client approaches you to advise him/her on the type of operating system to use on his/her computer:
- i. Describe the term *operating system*.
- (2 marks)

- ii. Describe **two** types of operating system according to the number of users it supports. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Study the spreadsheet below of marks of two students in a diploma in ICT class at Machakos university and answer the questions that follow:

	A	B	C	D	E	F
1		C. A	MATHS	PROG.	TOTAL	
2	JOHN	45	18	28		
3	MARY	75	56	59		
4						

Write down the formula that can be used to calculate the following:

- i. Total marks obtained by the two students in PROG (programming). (2 marks)
 - ii. The highest mark obtained by Mary in the three units. (2 marks)
 - iii. Count the number of students who scored 50 and above in Maths. (2 marks)
 - iv. Using the IF function, grade the students with the following criteria;

Total marks > 150 , Pass
 Total marks < 150 , Fail

 (4 marks)
- b) Differentiate between the following pair of terms in reference to spreadsheets:
- i. Formulae and Functions;
 - ii. Relative and Absolute Referencing;
 - iii. Sorting and Filtering. (6 marks)
- c) Outline four uses of the internet. (4 marks)

QUESTION SIX (20 MARKS)

- a) Describe **two** areas where spreadsheet programs can be applied. (4 marks)
- b) Outline **four** examples of desktop publishing packages found in the market today. (2 marks)
- c) Outline **four** functionalities/operations of a mouse. (4 marks)

- d) Draw a well labelled block diagram of a digital computer system clearly indicating the data flow and the flow of controls. (10 marks)

QUESTION SEVEN (20 MARKS)

- a) Highlight *any six* advantages and *any four* disadvantages of using computers. (10 marks)
- b) Explain *any five* factors which should be considered in the acquisition of computer software. (10 marks)

QUESTION EIGHT (20 MARKS)

- a) Describe the following terms in relation to windows 2007:
- i. GUI operating system;
 - ii. Menu bar. (4 marks)
- b) Briefly explain the following features of a database:
- i. Tables;
 - ii. Queries;
 - iii. Report. (6 marks)
- c) Differentiate between the following terms in relation to database.
- i. Field and Record;
 - ii. Primary key and Foreign Key; (4 marks)
- d) Databases offer the ability for creating relationships in the tables you have created. Describe the **three** types of relationships in databases. (6 marks)