

UNIVERSITY OF EMBU
2019/2020 ACADEMIC YEAR
FIRST SEMESTER EXAMINATION
FIRST YEAR EXAMINATION FOR THE DIPLOMA IN INFORMATION
TECHNOLOGY

SIT 054: INTRODUCTION TO COMPUTER APPLICATIONS

DATE: JANUARY 15, 2020

TIME: 11.00 – 1.00 PM

INSTRUCTIONS:

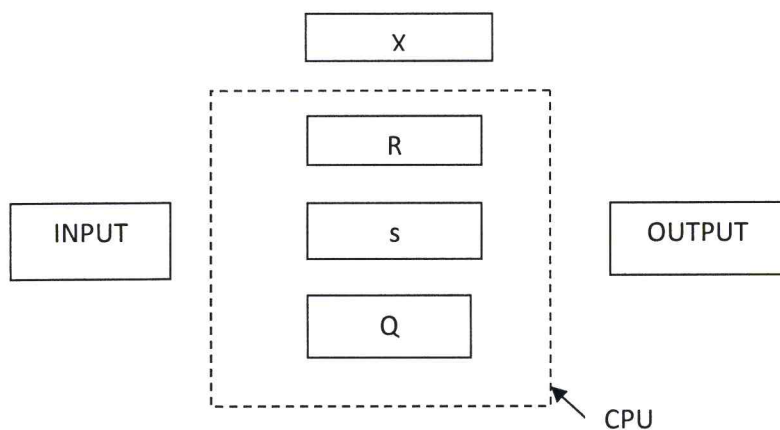
Answer Question ONE and ANY other two Questions

QUESTION ONE (30 MARKS)

- a) Give the basic definition of a computer (2 marks)
- b) Giving examples, distinguish between hardware and software. (4 marks)
- c) Describe three factors used to classify computers. (3 marks)
- d) Describe an operating system citing three examples. (5 marks)
- e) Distinguish between in-house and vendor off-shelf software (4 marks)
- f) Describe the following terms as used in word processing. (3 marks)
 - i) Character
 - ii) Word
 - iii) Sentence
- g) i) Describe five features of spreadsheets that are useful in financial modeling. (5 marks)
 - ii) Name *four* data types used in spreadsheets. (4 marks)

QUESTION TWO (20 MARKS)

a) The diagram below represents essential features of a computer system. Study the diagram and answer the questions that follow.



- i) Name the components (4marks)
 - X-
 - R-
 - S-
 - Q-
- ii) State *two* roles of the component named Q. (2marks)
- iii) In the diagram above, indicate the direction of data flow using arrows. (2 marks)
- iv) An operating system is system software that interfaces the user to the computer hardware. It is important software as it plays vital roles in the entire computer system. Describe how it achieves this status. (12 marks)

QUESTION THREE (20 MARKS)

- a) i) What is a word processor? (2 marks)
 - ii) List *three* common examples of word processing software widely used in the market today. (3 marks)

b) Give three comparisons of the traditional method of typing a document on a typewriter

against using a word processor.

(6 marks)

- c) Veronica tried to retrieve a document file following all the steps correctly. The filename did not appear in file list box. State three causes for this. (3 marks)
- d) The following is an extract of a document. Use it to answer the questions that follow.

Phishing

In the area of computer security, phishing is the criminally fraudulent process of attempting to acquire sensitive information such as user name, password codes and credit card details by camouflaging as a trustworthy entity in an electronic Communication

Communications *purporting* to be from popular social web site, auction sites, online payment Processors or IT administrators are commonly used to lure the *unsuspecting public*. Phishing Is typically carried out by e-mail or instant messaging, and it often directs users to enter details at a fake website whose look and feel are almost identical to the legitimate one.

Even when using the server authentication, it may require tremendous skill to detect that the Website is fake. Phishing is an example of social Engineering techniques used to fool users, And exploit the poor usability of current web security technologies. Attempts to deal with the Growing number of reported phishing include legislation, user training, public awareness and Technical security measures .

List six formatting features used in the above text (6 marks)

QUESTION FOUR (20 MARKS)

- a) What is electronic spreadsheet software? (2 marks)
- b) Explain four application areas where spreadsheet software can be used. (8 marks)
- c) The table below represents the results analysis for both CAT 1 and CAT 2 for different students. Study it and answer the questions that follow.

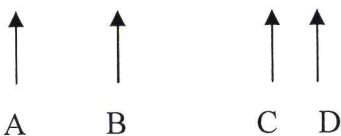
RESULTS ANALYSIS					
Reg no	Name	CAT 1	CAT2	TOTAL	AVERAGE
B53/8070/2018	John	25	27	52	26
B53/8101/2017	James	20	15	35	17.5
B53/8115/2018	mercy	17	18	35	17.5
B53/8128/2018	marlon	23	22	45	22.5
B53/8143/2017	peter	34	31	65	32.5
B53/8160/2018	ndegwa	25	14	39	19.5
highest		34	31		
lowest		17	14		

- i) What is the name of the **active sheet**? (1 mark)
- ii) By looking at the above picture, give the **reference of an active cell**. (1 mark)
- iii) What formulas did the examiner use to achieve the following: total, average, highest, lowest. (4 marks)
- iv) List four application programs classified as spreadsheets. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Define a database. (2 marks)
- b) Explain **three** types of database models. (6 marks)
- c) State the use of the following objects in databases. (3 marks)
 - i) form ii) Query iii) Table
- d) The following car details are to be entered in a database: Make, Date-of-manufacture, colour, and cost. Prepare a suitable database structure showing field names and their field data types (5 marks)
- e) Identify the parts of the following e-mail address labelled A, B, C and D. (4 marks)

lat @africaonline . co . ke



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