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**SUBJECT: INFORMATION & COMMUNICATION TECHNOLOGY**  
**SUBJECT CODE: 2908/103**  
**CLASS: DHRM 2013**  
**LECTURER: DAVID KIARIE**  
**DATE: 29<sup>TH</sup> MAY 2013**  
**TIME: 2 ½ HOURS**

**INSTRUCTIONS:**

*This paper consists of SIX Questions. Answer Any FOUR Questions.*

**QUESTION ONE**

- a) Define the term 'network' as used in ICT. [2mks]
- b) With the aid of a diagram, describe four components of the central processor. [8mks]
- c) Explain **two** factors considered when purchasing a computer. [4mks]
- d) Briefly, describe two types of ROM. [4mks]
- e) A Human Resource Manager would like to create a letter for 100 employees in a company. Explain the appropriate word processor feature that will help the manager in carrying out the task. [2kms]

**QUESTION TWO**

- a) Two ways of classifying computers is in terms of 'size and capabilities' and 'generations'. Describe **two** types of computers in each category. [8mks]
- b) (i) Define a DBMS. [2mks]  
(ii) Describe two components of a DBMS. [4mks]  
(iii) Outline two functions of a DBMS. [2mks]
- c) State **two** areas where presentation software can be used. [2mks]
- d) Outline **two** uses of Internet in an organization. [2mks]

**QUESTION THREE**

- a) Some contents of computer files consist of *bit*, *field*, and *block*. Describe each of the content. [6mks]
- b) Describe the following file organization methods:
  - i. Serial
  - ii. Sequential [4mks]
- c) define the following components of a computer network:
  - i. Hub
  - ii. Router
  - iii. Modem [6mks]
- d) Distinguish between *absolute* and *relative* cell addressing as used in spreadsheets. [4mks]

#### QUESTION FOUR

- a) Computer software is classified into two areas namely system software and application software. Examples of system software include: translators and utilities while examples of application software are general packages, tools and specialist packages

Required:

- i. Describe briefly two types of translators. [4mks]
  - ii. What is a utility? [3mks]
  - iii. Describe two types of utilities. [6mks]
  - iv. What are specialist packages? [3mks]
- b) Identify **four** health hazards associated with the use of computers in an organization. [4mks]

#### QUESTION FIVE

- a) Define the term **database**. [3mks]
- b) Describe the following types of databases: -
- i. Relational database
  - ii. Network database
  - iii. Hierarchical database [6mks]
- c) Explain the following terms as applied in spreadsheet programs:
- i. Sorting
  - ii. Filtering [4mks]
- d) Distinguish between a CD-ROM and a DVD. [3mks]
- e) Describe the *data processing cycle*. [4mks]

#### QUESTION SIX

- a) The table below shows marks for various subjects scored by students in a spreadsheet program.

	A	B	C	D	E	F	G
1	NAME	ICT	ACCOUNTS	HR	TOTAL	AVERAGE	RESULT
2	Jane	35	20	40			
3	James	47	65	70			
4	rose	70	55	80			
5	Highest marks						
6	Lowest marks						

Write a formula to perform each of the following, indicating the cell where the formula should be placed:

- i. Calculate the total marks for each student.
  - ii. Calculate the mean marks for each student.
  - iii. Find the highest marks.
  - iv. Find the lowest marks.
  - v. Generate results as “pass” when the average mark is greater than 40 or “fail” for otherwise. [12mks]
- b) In computer crimes, describe the following terms:
- i. Virus
  - ii. Hacking
  - iii. Eavesdropping
  - iv. Worm [8mks]