MBOONI WEST SUB-COUNTY FORM FOUR JOINT EVALUATION TEST 2014

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

(a) Type your name and index number at the top right hand corner of each print out

(b) Write your name and index number on the CD-R provided

(c) Write the name and version of software used in each question on the answer sheet

(d) Answer **ALL** the questions

(e) Passwords **should not be used** while saving in the CD-R

(f) All answers **MUST** be saved in the CD-R

(g) Make print out of answers on the answer sheet provided

(h) Arrange your printouts and tie/ stapple them together

(i) This paper consists of 4 printed pages. Candidates should check to ensure that all pages are printed as indicated and no questions are missing

FOR EXAMINER'S USE ONLY.

Question	Candidate's score
1	
2	
Total score	

1. (a) Type the following passage exactly as it appears using a word processor and save it as EXERCISE

(20marks)

PROCESS OF INFORMATION SYSTEM DEVELOPMENT
<u>INTRODUCTION</u> <u>TO</u> <u>INFORMATION</u> <u>SYSTEM</u> <u>DEVELOPMENT</u>

The methodology area can justly be described as a jungle. Firstly there appears to exist many hundreds of the system development methodologies. Longworth (1985) in a recent study identified over 300. If all these are different, then it is no wonder that there is so much confusion. However, it may be that the differences are trivial and are made solely to differentiate methodologies in the market place.

WHAT IS A METHODOLOGY?

The term methodology is not well defined either in Literature or by practitioners. There is very little agreement as to what it means other than at a general level. The term is usually used very loosely and yet it is used very extensively.

This loose use does not mean that there are no definitions, simply that there are no universally agreed definitions. At the general level, it is regarded <u>as a recommended series of steps and procedures to be</u> <u>followed in the course and developing an information system</u>. In a brief *adhoc* survey, this proves to be about the maximum that people will agree to and of course such a definition raises many more questions than it answers.

For example:
- What is the difference between a methodology and a method?
- Does a methodology include a specification of the techniques and tools which are to be used?
- Does a collection of techniques and tools constitute a methodology?
- Should the use of a methodology produce the same results each time?

The questions that arise are fundamental as well as numerous. Unfortunately the most that can be achieved is to air the issues. The information system community is in the process of debating the meaning of the term methodology in an information system context, and it may one day have a universal definition. However, it may be more realistic to assume that this will never be achieved. An information system's methodology has been defined as *a recommended collection of philosophies, phase, procedures, rules, techniques, tools, documentation, management and training for developers of information systems.* (Madison 1983).

According to this definition, a methodology has a number of components.

Which specify:

(i) How a project is to be broken down into stages

(ii) What tasks are to be carried out at each stage

(iii) What outputs are to be produced

(iv) When they are to be carried out

(v) What constraints are applied

(vi) What support tools may be utilized

In addition, the methodology is supposed to specify how the project is to be managed and controlled and support the training needs of the users of the methodology. This is all encompassed in a view or philosophy concerning the important and critical aspects of information systems development.

Required to

b) Remove the underline from all the underlined and change the text to bold and italics.

Apply hanging ident to the first two paragraphs. Save the document as EXERCISE 2.   (6marks)

c) Select the text starting from the words "For example:….. information systems development" (at the end of the passage) and move it to a new page and save as EXERCISE 3.   (5marks)

d) (i) Retrieve **EXERCISE** document and convert it to two columns of the same width and height and justify them.   (6marks)

(ii) Double space the first paragraph of the passage and fit the entire passage into one page   (4marks)

(iii) Insert your name into the passage as a footer so as to appear as © your name. Save the document as **EXERCISE 4.**   (5marks)

d) Print **EXERCISE, EXERCISE 2, EXERCISE 3, EXERCISE 4**   (4marks)

2. Employees of Sunshine Company are paid salaries which comprise of Basic salary, house allowance and medical allowances. The gross salary of each employee is calculated as the total of the three payment categories.

Below is a list of allowances and basic salaries for ten employees in the month of July 2003.

	MEDICAL ALLOWANCE	**HOUSE ALLOWANCE**	**BASIC SALARY**
MURTAZA	5,000	10,000	20,000
WASIM	3,000	8,000	16,000
MWANGI	3,500	8,000	16,000
ISHO	6,000	12,000	25,000
MITESH	2,500	6,500	12,000
MITHEU	2,500	6,500	12,000
KRISHNA	7,000	15,000	30,000
MBUGUA	3,500	8,000	16,000
KASOO	3,500	8,000	16,000
SARU	3,500	8,000	16,000

a) Using the above information, design an appropriate spreadsheet and enter the given sample data. Give the spreadsheet an appropriate title and save at MOCK_1.   (12marks)

b) Calculate the gross salary for each employee. Label it appropriately on the spreadsheet. Write the formular used for Saru's gross salary, on the sheet provided.   (6marks).

c) Fatuma Ndeche joined the company at management level and was paid 20% Basic salary more than Krishna was paid. If her medical allowance and house allowance was calculated at 30% and 50% of her basic salary respectively. Calculate and fill a record for Fatuma Ndeche on the spreadsheet. Write the formulae used on the answer sheet provided. Save the spreadsheet as MOCK _2   (6marks)

d) Calculate the average of basic, house allowance and medical allowance for the employees. Label these averages appropriately and write the formula used to calculate the average for basic salary on the answer sheet provided. Save the spreadsheet as MOCK_3.   (7marks)

e) Count all the employees whose house allowance is above Kshs. 10,000 and place your results in an empty cell. Label the result appropriately. Write the formula used on the answer sheet provided (6marks)

f) The company would like you to help them sort out the employees in the management from others. By labeling a column STATUS, generate the appropriate status for each employee given that those who earn a basic salary above Kshs. 20,000 are in the management while others are uniosable. Write on the answer sheet provided the function you used for Krishna. Save the spreadsheet as MOCK_4. (6marks)

g) Plot a line graph of employees against gross salary. Add a title, axes and a legend. Save the graph as MOCK_5. (5marks)

h) Print MOCK_1, MOCK_2, MOCK_4 and MOCK_5. (2marks)