

451/2
COMPUTER
PRATICAL
PAPER 2
MARCH /APRIL
TIME: 2 ½ hours

MOKASA JOINT EVALUATION EXAMAINATION
Kenya Certificate of Secondary Education (K.C.S.E.)

Computer
Paper 2

INSTRUCTIONS TO CANDIDATE

- Type your **name** and **index number** at the top right corner of each print out
- Write your **name** and index number on the **CD RW**.
- Write the name and version of the software used for each question in the answer sheet.
- Passwords **should not be used** while saving in the **CD- RW**
- Answer **all** questions.
- All questions carry equal marks.
- All answers **must** be saved in your CD- RW.
- Make a print out of the answer on the answer sheets provide.
- Hand in all the **printouts** and the **CD-RW**.

QUESTION ONE

The below question shows the working details of employees in Twitzu company Ltd

Employees records for the month of March 2011

No	NAME	DEPARTMENT	MARITAL STATUS	ALLOWANCE	HOURS
1	KALONZO JOHN	ACCOUNTING	SINGLE	1500	280
2	BETIA MUAS	ACCOUNTING	SINGLE	1500	140
3	FAUSTINA MAKHAEHA	COMPUTER	MARRIED	2000	190
4	CLAUDIA JEYALE	COMPUTER	MARRIED	2000	350
5	PETER ODUOR	PRODUCTION	MARRIED	1200	100
6	ALEXANDA SIKHECHULA	PRODUCTION	SINGLE	1200	195
7	ALI MOHAMED	SALES	MARRIED	1400	240
8	LYELVA SLOTA	SALES	MARRIED	1400	31
9	CHRISTINE NABUBENDA	SALES	MARRIED	1400	346
10	WAMBWABA JONI	PROCUREMENT	SINGLE	1100	230
11	AISHA MWANAALI	PROCUREMENT	SINGLE	1100	125
12	SILANGASHA MWAMU	PROCUREMENT	SINGLE	1100	12
13	MCHEYANE PETER	PROCUREMENT	MARRIED	1100	330
14	PETISHWA PENDO	PROCUREMENT	MARRIED	1100	350
15	VALENY WAMBEZO	ENGINEERING	SINGLE	2000	342
16	IRENE BAMBUA	ENGINEERING	SINGLE	2000	290
17	FEMZ MWANAISHA	ENGINEERING	SINGLE	2000	30
18	GIFT MWANAKADA	PRODUCTION	MARRIED	1200	240
19	PAULINE MTAYALE	COMPUTER	MARRIED	2000	315
20	BLESSING WABAUAKA	SALES	MARRIED	1400	360

- a) Enter the above data and save as Twitzu
- b) Copy the content of the worksheet to a blank page and insert the following blank columns. Label the new column gross pay respectively.
- | Gross | tax |
|--------------------------|-----|
| Gross > 100,000 | 10% |
| Gross < 100,000 > 80,000 | 8% |
| Gross > 60,000 < 100,000 | 6% |
| Gross < 50,000 < 12,000 | 3% |
- Using a formulae compute the gross pay. 4mks
- c) Using IF function compute the tax 4mks
- d) Compute net pay using a formula 2mks
- e) Rank the employees in descending order based on the net pay 2mks
- f) using a function determine the lowest and the highest net pay for all employees 2mks
- g) create a bar chart for employees I procurement department to compute each employees net pay. Put the chart on its own sheet 5mks
- Format the worksheet as follows
 - Outer Borders: double line
 - Field headings 45 align
 - Marge and center the title “ Twitzu company limited” across the field.
 - Format the column of net pay to Ksh
- 4mks

- h) employees are given a commendation “congratulation” from the company manage if net is > 80,000 and “Good effort” < 80,000. use a function to determine the number of employees who are awarded “congratulation” . save as Twitzu 2. 3mks
- i) print the two worksheet and the bar chart 3mks

Question 2

MEASUREMENT AND INSTRUMENTATION SYSTEM

1. INTRODUCTION

The ability to make accurate measurements is fundamental in enabling us to engage in science and engineering. Our daily performance is centered on our ability to quantify delivered consumed e.g electric energy) to verify desirable amount (e.g blood pressure) and safe amounts (e.g traffic).

Over the year last decade tremendous advances have been made in the field of electrical / electric engineering.

This course introduces the fundamentals of industrial and process instrumentations. The course seeks to provide students information that should enable them to;

- Effectively operate existing in industrial / process instrumentation devices and systems
- Guide the acquisition of new instrument devices when need arises
- Engage in research and development of new measurement systems

1.1 PROCESS VARIABLE AND THEIR MEASUREMENT.

All engineering operations depend on the measurement and control of process variables.

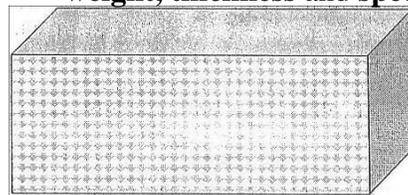
A process variable is defined as any condition or state of process material or of its environment that is subject to change.

1.2 classification process variable
three classes of process variables are introduced:

- Energy variable
- Quantity and rate variables
- Physical and chemical characteristics

A) energy variables are those that are affected by the energy state of the material. Include temperature, pressure, pressure / vacuum, electricity, sound, radiation , etc

B) quantity and rate variable are affected by the quantity and flow rate relations of several materials in the process examples include **fluid flow, liquid level, weight, thickness and speed**



C) Physical and chemical characteristics are those that are dependent on the physical and chemical characteristic of the material. This include density, humidity, moisture content, viscosity, calorific value, colour electrical and thermal conductivity

1. Using DTP software of your choice produce the following publication and save as INSTRUMENTATION (36 MKS)
2. (a) paper size A4 portrait
(b) 2 columns
(c) Space between column 0.3”
(d) Margins (Top, Bottom, Right, Left)1” (4mks)
3. Drop cap should be dropped five lines
(i) Font type IMPRIT SHADOW
(ii) Bold
(iii) Colour BLUE (5mks)
4. Use text font BOOKMAN OLD STYLE size 12 for the rest of the text. (1mk)
5. The cuboids’
(i) colour is ACCENT 4
(ii) pattern is SOLID DIAMOND
(iii) shadow style 2 (3mks)
- 6 print your publication. **TOTAL (50 marks)**