451/1 COMPUTER STUDIES Paper 1 (THEORY) Time 2 ½ HOURS

Kenya National Examination Council (K.C.S.E)

451/1 COMPUTER STUDIES Paper 1 (THEORY) Time 2 ½ HOURS

## **INSTRUCTIONS TO CANDIDATES**

- 1. Write/type your name and index number at the top right hand corner of each printout.
- 2. Write your name and index number on the storage medium
- 3. Answer ALL the questions.
- 4. All questions carry equal marks.
- 5. Passwords shoul4 not be used while saving in the storage medium
- 6. All your answers must be saved in your storage medium
- 7. Make a printout of the answers on the answer sheets provided.
- 8. Arrange your printouts and tie/staple them together in their order.
- 9. Hand in all the printouts and the storage medium

This paper consists of 12 printed pages.

Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing

1. SURA MBILI HIGH SCHOOL who were contesting for the over roll post of "Headboyship" amongst other posts in the 4-classes; Form I, II, III and IV. Take up the spirit of the school's news reporter and a computer studies student and assume you are now working in the office of the School Election Committee and enter the data below in spreadsheet application software exactly as it appears. (a) The worksheet below shows the votes gathered by 12 students of printable lines and borders.

Save it as Sura Mbili Election 1 and close. (5 Mks)

A	В		C	D	E	F	G	Н	<b>I</b> '	J
		-				·				
1										
2										
3		SEX	REG. FEE	FORM I VOTES	FORM 11 VOTES	FORM 111 VOTES	FORM IV VOTES	TOTAL VOTES	AVERAG E	
4	Students Per a Class			346	350	290	415			
5	CANDIDATE NAME									
6	Mandela Morphat	Male	200	42	40	45	79			
7	Siminyu Wanjala	Male		24	20	18	4			
8	Kiptoo Rotich	Male	200	24	25	11	30			
9	Saida ShidaSaidi	Female	200	20	23	26	1			
10	Patel Rishyankee	Male	200	45	10	1	36			
11	Bibiana Kombora	Female		0	30	15	76			
12	Ogolla Victor	Male	200	54	60	40	69			
13	Ole Arap Tumboei	Male		49	10	11	0			

b) (i) Retrieve Sura Mbili Election 1 and enter the title "SURA MBILI HIGH
SCHOOL in cell Al and a sub-title
"Post of Headboyship General Election" in cell A2, Bold, font size 18 then

Centre across the spreadsheet. (2mks)

- (ii) Insert a header reading "Mawesse Joint Mock-Marakwet West District" and a footer indicating the name of your school. (2mks)
- (iii) Saida Shida Saidi was nullified hence remove her record (1mk)
- (iv) The votes for Bibiana Kombora for Form 1 was incorrect and should be adjusted to 1 Vote. Update her record (Imk)

(c)

- (i) Compute the Total votes for Mandela Morphat and copy the formula down the list.

  Write down the formula used on the answer sheet provided (2mks)
- (ii) Calculate the total Votes for Form 1 class and copy the formula across the list.

  Write down the formula used on the answer sheet provided (2mks)
- (iii) Get the average votes for each candidate and for each class. Write down the formula used on the answer sheet provided (2mks)
- (iv) Move the record of Kiptoo Rotich so as to be between Iduli Shibuta Ann and Shiundu Martin. (2mks)
- (d) Save the workbook as 'Election 2 and close it.

  Retrieve Election 2 workbook and enter a formula in cell C20 which will help count all the candidates who did not pay for registration fee. Type a label against it in cell B20 "Non Registered" write down the formula used on the answer sheet (3mks)
- (e) Registration fee was projected to be raised to 39%.
  - (i) Insert a new blank column after Reg.Fee and enter the label % increment in cell D5

    And a value B9 in cell C5 (2mks)
  - (ii) In cell D6 use an absolute cell referencing to predict the newly proposed
    Registration
    Fee for each candidate. Write down the formula used on the answer sheet provided
    (3mks)
  - iii) Using a suitable formula in cell E22, determine the sum of spoiled votes for Form I class and copy the formula to complete for other classes too. Write down the formula used on the answer sheet provided (2mks)
- (f) By carefully entering a suitable formula on cell E23 and E24 determine:
  - (i) Number of candidates whose votes were 30 and above in Form I then copy the Formula across to Form IV. Write down the formula used on the answer sheet provided (2mks)
  - (ii) The highest votes in each class. Write down the formula used on the answer

    Sheet provided (2mks)

    Save it as Election 3
- (g) For one to be a Head Boy, must gather over 45 votes in Form I, over 50 votes in Form II, over 25 votes in Form III, over 60 votes in Form Iv and at least a total of 200 votes and above from the 4 classes.
  - (i) Introduce a formula in cell K6 and copy it down the list to determine the winner by a remark "Head boy winner" or" Looser". Write down the formula used on the answer sheet provided (3mks)

(ii) Plant a formula in cell L6 which will remark votes as below by basing on Average of votes for each student: Write down the formula used on the answer sheet provided

55 vote\and above - "Head boy"

Between 40-55 -"Prefect"

Below 40 -"Unpopular" (3mks)

- (iii) Filter out a list of prefects only including Head boy. Copy this record and paste in Sheet 2. Rename this sheet as 'prefects'. (2mks)
- (iv) Sort your records in descending order of average votes for candidates. (1mk) Save it as Finalized Election and close.

h)

- (i) Open "Finalized Election" and use its data to plot a column graph on its own sheet showing the candidates name and the average votes only. (2mks)
- (ii) Rename this sheet as 'Graph (½ mk)
- i) Label:

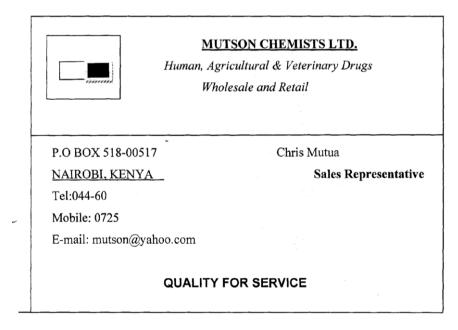
The chart title as "Head Boy's Election 2012" (1mk)

Y-axis and X-axis appropriately (1mk)

Legend position to the right. (Imk)

Save the changes to your workbook.

- j) Print Sura Mbili Election 1, Election 2, Election 3 and Finalized Election; sheet 1 and sheet 2 ALL in landscape orientation. (2 ½ mks)
- 2. (a) Use a DTP software to design the following (30mks)



b) Fit 8 copies of the design on a single page

(16 mks)

c) Print 2 copies of your publication. I in land scape page orientation, the other in portrait

Page orientation (4mks)

Computer 451/2

Turn Over