

**451/2**  
**COMPUTER STUDIES**  
**Paper 2**  
**PRACTICAL**  
**July/August 2010**  
**2 ½ Hours**

**NYAMIRA NORTH JOINT EVALUATION TEST**  
*Kenya Certificate of Secondary Education (K.C.S.E)*

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### **INSTRUCTIONS TO CANDIDATES**

- *Write your name and index number in the spaces provided above*
- *Sign and write the date of examination in the spaces provided above.*
- *Write the name and the version of the software used for each questions attempted in the answer sheet*
- *Answer all the questions*
- *All questions carry equal marks*
- *Passwords should not be used while saving in the diskette/removable media*
- *All answers must be saved in your diskette/removable media*
- *Make a print out and tie/staple them together*
- *Hand in all the printout and the diskette/removable media*

*Ensure that all the pages are printed as indicated and no questions are missing.*

1. A consultancy firm keeps its details in a computer database. The information below contains details obtained from two tables of the database. Study the tables and answer the questions that follow.

Employee table

EMPLOYEE ID	EMPLOYEE NAME	DEPARTMENT	JOB TITLE	SALARY
7369	Mark Koech	Research	Clerk	48,000
7499	Philip Meme	Sales	Salesman	16,000
7521	Mohamed Ali	Sales	Salesman	12,500
7566	Kennedy Simiyu	Research	Manager	39,750
7698	David Kamau	Operating	Manager	38,500
7782	Titus Ole Simiani	Operating	Manager	34,500
7788	John Onyango	Accounting	Analyst	30,000
7821	Patel Shah	Research Operations	Analyst	25000

Department table

DEPARTMENT CODE	DEPARTMENT NAME	LOCATION
10	Accounting	Nairobi
20	Research	Nakuru
30	Sales and marketing	Mombasa
40	Operations	Kisumu

Required

- (a) Create a database that can be used to store the above data and save it as ALMAC in the disk provided. (10mks)
- (b) Using appropriate key and foreign keys, create a relationship between the two tables. Enter referential integrity between the tables. (4mks)
- (c) Validate the primary key entry to exactly four and two character for the employee ID and dept code fields respectively. (4mks)
- (d) Create a form for each table and use it to enter records shown in the tables above. Save the form as employee form and depart form respectively. (8mks)
- (e) It is required that the dates on when the employees were hired be included in the database. Koech was hired on 10/6/98, Meme in 15/8/96, Muhammed in 16/3/96, Onyango on 9/3/03, the rest were hired on 13/3/04. Insert a new field name it date of hire in the employees table and enter the records. (8mks)

- (f) (i) Create a query that displays employees who were employed after year 2000. Save the query as LATEST EMPLOYEES. (8mks)  
(ii) Sort latest employees query in ascending order using the employee's name. (2mks)
- (g) Create a report that displays the employee name, job title, department, name and salary, grouped according to location. Save the report as EMPLOYEES REPORT. (4mks)
- (h) Print  
(i) Employees and department tables designs  
(ii) Employee and department forms  
(iii) Latest employees query  
(iv) Employees report.  
(2mks)
2. The following is an extract of soil samples collected from a given agricultural station in kilograms (KG)

Figure 1

	A	B	C	D	E	F	G	H	I
1	STATION	MON	TUE	WED	THUR	FRI	SAT	SUN	
2	KIEGOGI	29.4	27.1	14	18	31.5	30	26.5	
3	NYARAMBA	11.1	14	15.3	16	11.2	8	7.3	
4	NYAMATIMBO	16	15	15.7	16	17	19	22.5	
5	KENYORO	18	24	19	22.5	28	30	33	
6	BONYUNYU	22	25.2	26	29	27	31	36	

- (a) Type the data as it is and save it as KILOGRAMS (7mks)
- (b) (i) Insert two blank rows at the top of the worksheet and type the heading "Soil in Kilograms (KG) in the first blank row. (3mks)  
(ii) Type the heading "Soil in Kilograms (KG)" into cell B10 (1mk)  
(iii) Merge the cells containing each of the headings (4mks)
- (c) (i) Copy the names of the stations into cells A13 down the column (3mks)  
(ii) Copy the days of the week Mon, Tue... Sun into cells B12 along the row (2mks)
- (d) Type 32 and 18k into cells B20 and B22 respectively and use them as cell reference to compute the tones (T) values using the formula  $T = 32 + 18k$  where k is the soil samples. (11mks)
- (e) Convert all the soil values to one decimal place. (6mks)
- (f) (i) Compute the average soil values for each station in both in kilograms (KG) and in

- Tonnes (T) in column I (3mks)
- (ii) Convert the average soil to two decimal places. (3mks)
- (iii) Save the worksheet as soil all. (1mk)
- (g) Create a pie chart showing the stations and average soil in kilograms (KG). (4mks)
- (h) Print soil all and the pie chart. (2mks)