451/2

NAME…….…… INDEX NO……..……..

SIGNATURE…….……DATE……..

Atika School

Free Online Academy

COMPUTER STUDIES
PRACTICAL
PAPER 2
TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES:

1. Type your name and index number at the top right hand corner of each printout.

2. Write your name and index number on the CD.

3. Write the name and version of the software used for each question in the answer sheet.

4. Passwords **should not be used** while saving in the

5. Answer all questions. All questions carry equal marks.

6. Hand in all the **printouts** and the **CD.**

This paper consists of 7 printed pages.
Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing

QUESTION 1: SPREADSHEETS

1. The following are the KCSE results for a certain school in Nyeri. Enter the data as it is in Excel and answer the question that follows.

KIMAKANIA HIGH SCHOOL NYERI													
NAME	Eng	Kis	Mat	Bio	Phy	Chem	Hist	Art	Comp	Bst	Ave. point mark	Overall grade	Rank
THIRU	B+	B	A	B-	A	B	B-	A-					
KIPTOO	A-	B+	A	A-	A	A-	A-			A			
COLLINS	B+	B	A	B+	A	B	B	A					
RONALD	B+	A	A	A-	A	B+	B+		A				
FREDRICK	A	A	A	B	A	A-	A-		B+				
NJEGE	B+	B+	A	A-	A	B+	B+		A				
MUARINE	A	B	A	A	A	A-	A-			B-			
KIBET	B	A-	A	A	A	A	A			A			
WAFULA	B	B	A	B+	A	B-	B-			A			
NDIRANGU	B+	A-	A	B	A	B	B			A			
OTIENO	B+	C	A	A-	A	A-	A-			A			
MATU	B	A-	A	B+	A	B+	B+		A				
KIBUTHA	B	B	A-	B+	A-	B+	B+		A				
KIRURI	A	B+	A	A	A	A-	A-		A				
AMING'A	B	A	A	A-	A	A-	A-			C+			
JACKSON	B+	C+	A	B+	A	A	A		B-				
MUMBI	A-	A-	A-	B+	B+	B+	B+		A				
KIGUTA	B+	A	A	A	A	A-	A-		A				
MWANGI	B	A-	A	B+	A-	A-	A-	A-					
WAMUCIE	B+	B	A	A-	A	A-	A-	A					
MBUGUA	B+	B-	A	B	A-	B-	B-	A					
OGEGA	B-	A-	A-	B-	B+	B	B	C					
HENRY	A-	A-	A	A	A	A	A		D+				
ABDI	A	B+	A	B+	A	A	A		A				
JAMES	B+	C-	A-	B+	A	A	A			B+			

a) Save your work as **Matokeo_Mufti**. [15 Marks]

b) Perform the following calculation for these columns and write down the formulas you used in the spaces provided below each question:

i) Use a formula to get the average point mark in the table above given that,

[3 Marks]

Average Point Mark = Average of (sum of point of all subjects)

GRADE	POINTS
A	**12**
A	**11**
B+	**10**
B	**9**
B-	**8**
C+	**7**
C	**6**
C-	**5**
D+	**4**
D	**3**
D-	**2**
E	**1**

ii) Determine each student's rank using the Ave. Point Mark.

[3 Marks]

iii) Use a formula to evaluate the Overall grade using the Ave. Point Mark, given that:

[3 Marks]

GRADE	MARKS
A	90-100
A-	81-89
B+	71-80
B	61-70
B-	51-60
C+	41-50
C	36-40
C-	31-35
D+	25-30
D	20-24
D-	16-19
E	Below 15

c. Add in the following table in the same sheet: [5 Marks]

	A	A-	B+	B	B-	C+	C	C-	D+	Number of Students	Max Grade Number	Min Grade Number	Average Mark	Average Grade	Rank	% Above Pass Mark
ENG																
KIS																
MAT																
BIO																
PHY																
CHEM																
HIST																
ART																
BST																
COMP																
Overall Grade																

d. **Calculate the following**:

(**NB//** Write the formulas used in the space provided below each question)

i) '**Number of students**' per grade for each subject, e.g. 10 students got an A in History. [3 Marks]

ii) '**Number of students**' column with the number of students who do the specific subject. [1 mark]

iii) '**Max Grade Number**' (=the grade with the highest number of students in that subject.) [1 mark]

iv) '**Min Grade Number**' (= the grade with the lowest number of students in that subject.) [1 mark]

v) 'A subject's Average Mark' = Sum of values for each grade divided by total number of students in that subject (Use the Grade-Value conversion table given in **Qn, 2a)(i)** [2 Marks]

vi) Average Grade of the Average Mark using the conversion table in **Qn. 2 b(ii) above.** **[2 marks]**

vii) Rank of each subject as per its average mark use the conversion table **Qn, 2a)(i) &(iii)** [4 Marks]

viii) A subject's '% Above pass mark' = Percentage of students who had B- or above in that subject. [4 Marks]

d) Plot a bar graph of the Subjects against their Average Mark [4 Marks]
e) Put a footnote with your ***name and index number*** in the same sheet and print your work. [2 Marks]
f) Print the work book [2 Marks]

QUESTION 2: DATABASES

2. Ogeke is the manager of a college's ICT department. He has been told to use Database Management System (DBMS) to update records for a fundraising data. Perform the following operations just like Ogeke would:

a) i) Create a **relational database** with four table; Class List, Family Details, Pledge Contributions and Walk Form Contributions. [4 Marks]

ii) Class List contains the following fields; Class no, first Name, surname. Family Details contains Family Id, Parents Name, Address, City and Class no. Pledge Contributions contains Pledge Id, family Id, Amount Pledged and Amount received. Walk Form contribution contains Walk Id, Class no, Walker Name, Amount Promised and Amount Paid.

iii) Save your database as **Mchango_01** [2 Marks]

b) Input the following Data into Mchango_01 [11 Marks]

CLASS LIST

CLASS NO	FIRST NAME	SURNAME
1	JACOB	MAUNDA
2	JAMES	MAMBO
3	MIKE	OGEKE
4	KEVIN	MALEWA
5	ALI	ABDI
6	PHARELL	OGEGA
7	RICHARD	MOKAYA
8	DENNIS	KIBET
9	JOHN	OTIENO
10	WILSON	KOBIA
11	JOHN	MATASIA
12	MOHAMED	ALI
13	JANET	WAMBUI
14	GERALD	KOECH
15	ANDREW	NGUGI
16	MICHAEL	GICHANGA
17	PETER	NG'ANG'A
18	CHRIS	SONKO
19	BENSUNDA	OWINO
20	FRANCO	WAFULA
21	KILLY	WAGAIYU
22	TONY	WAIGANJO

FAMILY DETAILS

FAMILY ID	PARENTS NAME	ADDRESS	CITY	CLASS NO
1	PROF & DR MAUNDA	89722	KISUMU	8
2	DR & MAMBO	55554	NAIROBI	21
3	MR & MRS OGEKE	6935	NYAMIRA	5
4	MR & MRS MALEWA	54897	NAIROBI	1
5	MR & MRS ABDI	12548	WAJIR	2
6	MR & MRS OGEGA	548	NAKURU	3
7	MR & MRS MOKAYA	1254	KISUMU	4
8	MR & MRS KIBET	5778	NAIROBI	6
9	MR & MRS OTIENO	3124	KISUMU	9
10	MR & MRS KOBIA	5546	NAIROBI	10
11	MR & MRS MATASIA	44977	NAKURU	11
12	MR & MRS MOHAMED	96587	NAIROBI	12
13	DR & MRS WAMBUI	4684	GARISSA	13
14	DR & MRS KOECH	44687	NAIROBI	14
15	MR & MRS NGUGI	99978	THIKA	16
16	MR & MRS NG'ANG'A	222	NAIROBI	17
17	MR & MRS GICHANGA	65	SIAYA	19
18	MR & MRS SONKO	650	BARINGO	20
19	MR & MRS OWINO	987	NAIROBI	22
20	MR JONES WAFULA	1	KISII	18
21	MRS KILLY	5541	KISUMU	7
22	DR & MRS TONY	88754	NAIROBI	15

PLEDGE CONTRIBUTIONS

PLEDGE ID	AMOUNT PLEDGED	AMOUNT RECEIVED	FAMILY ID
1	10000	8000	1
2	25600	25600	22
3	7800	6000	2
4	23690	0	3
5	6587	2300	4
6	3690	3560	7
7	5000	500	21
8	2478	1000	19
9	0	0	20
10	35697	0	15
11	2569	2569	12
12	200000	20000	10
13	2560	2500	8
14	4500	4500	18
15	8090	7500	14
16	9600	8560	5
17	1500	1350	6
18	7800	7800	9
19	12000	9850	14
20	1500	1356	12
21	6540	6540	11
22	1350	1200	13

WALKER FORM CONTRIBUTIONS

WALK ID	WALKER NAME	AMOUNT PROMISED	AMOUNT PAID	CLASS NO
1	GIKONGE	5000	3000	1
2	MORAA	2580	0	10
3	KERUBO	500	6000	16
4	JAMES	20	15	6
5	NJUKI	5980	2300	14
6	SABINA	6300	3560	7
7	JOHN	100	100	22
8	KALVIN	689	0	18
9	KOECH	8595	700	15
10	OTIENO	3695	300	5
11	ABDI	10000	10000	17
12	JACK	15698	68	20
13	EDWARD	12350	500	19
14	MUTITO	7050	5000	8
15	MWAMBORA	20000	6958	4
16	NJAMBI	1900	1200	3
17	KIPKEMOI	2300	2100	2
18	COLLINS	5640	4560	9
19	KARURI	1230	985	21
20	NYANCHAMA	456	400	12
21	OGEGA	780	700	13
22	CHEBII	5640	5600	11

i) Create a query that contains the *Parents Name* and the *students' first name* who have '**Promised'** more than **7000**. Save the query as **Promised_Mchango**. [5 Marks]

ii) Make a query and from it produce a report that list the student name and parents names of families who's **Amount Pledged** is equal to **Amount Received** and greater than 0. Save the query as **Received**Q and the Report as **Pledged_Received**. [10 Marks]

iii) Make a query from it to produce a report that calculates the difference between pledge and amount received from each family. Save the query as **Balance** and the Report as **Bal_report**. [10 Marks]

iv). Create **4 Reports** that can be used to display the *4 tables separately* in the database**.** Save them as ***PC, WFC, Class_list and Family_Details respectively*** **print these reports** [4 Marks]

v) Create **four forms** of each table above and save them as respective table names. [4 marks]

THIS IS THE LAST PRINTED PAGE