

451/2
COMPUTER STUDIES
Paper 2
(Practical)
July 2017
Time: 2½ Hours

FORM 4 END OF TERM 2 EXAM

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INSTRUCTIONS TO CANDIDATES

- * Write your name and index number on every printout in this examination.
- * Write the name and version of the software used for each questions attempted in the answer sheet.
- * Passwords **should not be used** while saving in the removable media.
- * Answer **ALL** the questions.
- * All answers must be saved in your removable media.
- * Make a print out and tie / staple them together.
- * Hand in all the **printouts** and the removable media.

1. **Shalom Generators and Water Pumps Dealers LTD** deals with sales of two types of goods namely Generators, and Water Pumps. Below is a table showing details of January 2017 sales.

Shalom Generators and Water Pumps Dealers LTD							
Sales as Per 31st January 2017							
Category Code	Category	Item Description	Amount			Tax	Net Amount
			Unit Price	Units Sold	Total Amt		
GN001	Generator	FG 290kVA	230000	7			
GN003	Generator	FG 25kVA	100000	16			
WP001	Pump	Honda WP-60	67000	10			
GN002	Generator	FG 220kVA	155000	6			
WP004	Pump	Honda WP-10	20000	17			
WP002	Pump	Honda WP-30	54000	15			
GN005	Generator	Sprint 3200A	80000	11			
GN004	Generator	ProMax 3500A	76000	12			
WP002	Pump	Honda WP-45	61000	9			
WP005	Pump	Honda WP-25	30000	15			
Tax Rates			Generator	15%			
			Pump	12%			

- (a) Create a workbook to store the information and save as **SHALOMGEN**. (14 marks)
- (b) Format the worksheet as follows:
- (i) Center the title across the columns. (2 marks)
 - (ii) The text of the title should be Arial, 18points, bolded and centered within a box. (2 marks)
 - (iii) Column labels to be bolded, wrapped within the cells and centered horizontally and vertically. (2 marks)
 - (iv) The unit price to be in two decimal places and currency prefix Ksh. (2 marks)
- (c) Use appropriate cell references to calculate:
- (i) the **Total Amt.** rounded to two decimal places. (3 marks)

- (ii) the tax is based on the type of the item. Use the rates in the table above to calculate **tax** payable on each item sold. (5 marks)
- (iii) the **Net Amt** which is the **Total Amt less Tax**. (2 marks)
- (d) Sort the worksheet in ascending order according to **category**. (2 marks)
- (e) Calculate the subtotals and grand total for all values in the two categories of machines (4 marks)
- (f) On a separate sheet, create a pie chart that compares total of **Net Sales** in each of the two categories. Label the chart appropriately, hence rename the worksheet as **Pie Chart**. (6 marks)
- (g) Save the workbook as **SHALOMGEN_FINAL**. (2 marks)
- (h) Print **SHALOMGEN, SHALOMGEN_FINAL** and **Pie Chart**. (3 marks)

2. **Wakanyua Training College** offers three Courses to students. A student sits for three exams every semester, each exam marked out of 100. The students must have been enrolled first. The following is sample data collected from the college database.

Courses

Course	Course description	Tuition fees
D-SECT	Secretarial Diploma	Kshs. 15,000
D-INT	Diploma in IT	Kshs. 18,000
D-ACCT	Diploma in Accounting	Kshs. 16,500

Students enrollment

Student ID	St name	Sex	Date enrolled	Course code
SECT- 01	Gladys Cherop	Female	12/05/2011	D-SECT
INT - 03	James Mucheru	Male	16/05/2011	D-INT
ACCT - 04	Peter Marangi	Male	18/05/2011	D-ACCT
SECT - 06	Jane Kamene	Female	17/05/2011	D-SECT

Exams offered

Exam code	Ex name
01	Opener
02	Midterm
03	Endterm

Exam performance

Exam record no	Student ID	Exam code	Semester	Score
1	SECT – 01	01	2	75
2	INT – 03	02	2	80
3	ACCT – 04	01	2	65
4	SECT – 01	02	2	70
5	ACCT – 04	02	2	60
6	INT – 03	01	2	68
7	SECT – 01	03	2	78
8	INT – 03	03	2	74
9	ACCT – 04	03	2	66

NB:- A course can be enrolled by many students and a student can do many exams. One exam can also be done by many students as shown in exam performance table.

Required

- Create a database file called **Wakanyua Training College** and save it. (2 Marks)
- Create a table structure for each of the four tables, setting most appropriate field as the primary key and choosing the most appropriate data type for each field. (12 Marks)
- Relate the four tables as required to have one to many relationships (4 Marks)
- Create a data entry form for each table (8 Marks)
- Using the forms, populate the tables with the records (8 Marks)
- Query the tables to show Sname, Coursedescription, Exname, Exrecordno and score for all students who scored greater than 70. Save the query as high score (5 Marks)
- Create a grouped report that displays every student's details and his or her exam performance as follows:
Student details – Sname, StudentID, Coursedescription.
Exam performance – Exname, Score, Average score.
Save the report as **performance report** (5 marks)
- Print **Exam performance table in landscape, high score query** in portrait and **performance report** in portrait orientation. (6 Marks)