KASNEB

DICT LEVEL III

COMPUTER APPLICATIONS PRACTICAL II

MONDAY: 23 May 2016. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question.

Additional instructions:
1. Save all your work in the flash disk provided and in a folder bearing your registration number.
2. Work on each question should be saved in the subfolder contained in the folder created in number 1 above. The name of the subfolder should correspond to the question number.
3. Your registration number MUST appear as a header on every printout containing your answers.
4. You must indicate the number of the question answered on the header created in number 3 above.

Note: The information in numbers 1-4 above must be computer generated.

At the end of the examination duration, you should hand in to the invigilator(s):

(a) The flash disk containing your work.
(b) All printed work.
(c) All unused printing paper(s).

QUESTION ONE
Using a word processing program, create a new document and save it as "Question One".

Use "Question One" document to key in and save solutions to question one (a) to (f).

(a)	Distinguish between "paste multiple" and "paste special" in the context of desktop publishing.	(2 marks)
(b)	Explain three advantages of grouping objects in a desktop publishing program.	(3 marks)
(c)	Citing an example, explain the term "volatile" as used in spreadsheet programs.	(2 marks)
(d)	List three delimeters used in a spreadsheet application.	(3 marks)
(e)	Highlight two characteristics of a primary key in the context of database applications.	(2 marks)
(f)	Using an example, explain a "union query" in the context of database applications.	(3 marks)

Save and print "question one" document.

(Total: 15 marks)

QUESTION TWO
Using a word processing program, create a new document and save it as "Question Two".

Use "Question Two" document to key in and save the solutions to question two (a) to (d).

(a) Explain the following concepts in the context of desktop publishing:

(i)	Side bar.	(1 mark)
(ii)	Pull quote.	(2 marks)
(iii)	Front matter.	(2 marks)

(b) Explain the following concepts as used in the context of spreadsheet applications:

    (i)   Constraints.   (1 mark)

    (ii)   Value field.   (2 marks)

    (iii)   Workspace file.   (2 marks)

(c) Highlight three advantages of normalising a database.   (3 marks)

(d) Outline two functions of a table analyser in the context of database systems.   (2 marks)

Save and print "Question Two" document.

(Total: 15 marks)

QUESTION THREE

(a) Using a database application, create a database called "Hospital".

In the "Hospital" database you have created above, design a table called "Employee" and enter the data below:

Employee No:	Employee Name	Date of birth	Department	Gross pay
01	James John	16/2/1973	IT	30,000
02	Margaret Willy	2/2/1960	Medical	40,000
03	Jane Kamau	2/6/1970	Accounts	15,000
04	Victor Mabwa	8/12/1981	Management	35,000
05	Thiery Henry	23/04/1984	Medical	46,000
06	Jacob Kiprop	19/12/1973	IT	40,000
07	Ahmed Mohamed	15/04/1969	Control	60,000

                                                                   (4 marks)

(b) Sort the records in ascending order based on the Employee Name field.   (2 marks)

(c) Insert two new fields to hold the "employees profession" and "deductions".   (2 marks)

(d) Use the data below to populate the fields:

Employee Name:	Employee Profession	Deduction (Sh.)
Ahmed Mohamed	Doctor	6,000
Margaret Willy	Doctor	6,000
Thiery Henry	Doctor	6,000
Jane Kamau	Accountant	4,000
Jacob Kiprop	Accountant	7,000
Victor Mabwa	Administrator	4,000
James John	System Analyst	2,000

                                                                    (8 marks)

(e) Extract a list of employees who were born between 1960 and 1973 both years inclusive and are doctors, accountants and administrator(s).

Save the database object as "Extract".   (2 marks)

(f) Using a suitable database object calculate the net pay of all employees as (Gross pay – Deduction).   (3 marks)

(g) Generate a columnar report based on the following fields; Employee no, Employee Name, Department and net pay. Sum up the net pay for all employees in the report. Save your report as "Net pay".   (4 marks)

Save "Hospital" database and print all objects you have created.

(Total: 25 marks)

QUESTION FOUR

The following spreadsheet data is extracted from the loan records of Mkopo Scheme.

MKOPO Loan Information

	A	B	C	D	E	F	G	H
1	Title	Last Name	First Name	ADDRESS	TOWN	RegNo	VEHICLE	Loan Amount
2	Mr.	SANDE	MARTIN	P.O. Box 39383	Nakuru	PL009	TOYOTA PRADO	1,400,000
3	Mr.	DIDDY	KEVIN	P.O. Box 84744	Kisumu	PV990	NISSAN SUNNY	675,000
4	Mrs.	CHEGE	PRISCA	P.O. Box 4449	Naivasha	PW890	MITSUBISHI LANCER	700,000
5	Ms.	KINYUA	RACHEAL	P.O. Box 889	Nairobi	PL012	TOYOTA MARKX	3,200,000
6	Mr.	NDETI	CHARLES	P.O. Box 7533	Mombasa	PY899	ISUZU BIGHORN	4,210,000
7	Mr.	MWAU	JEREMIAH	P.O. Box 29339	Nairobi	PQ812	NISSAN X-TRAIL	1,700,000
8	Mrs.	OBAT	STEPHANIE	P.O. Box 3882	Kisumu	PR720	TOYOTA PREMIO	1,498,000

	I	J	K	L	M	N	O
1	Interest P.A	Duration (Months)	Monthly Payment	Loan Start	Amount Paid	Unpaid Months	Penalty
2		30		24/08/2011	-108,494.72		
3		36		20/09/2011	-22,743.20		
4		18		26/04/2011	-215,066.60		
5		48		30/06/2011	-413,528.35		
6		60		25/07/2010	-1,281,498.40		
7		36		20/04/2011	-389,590.74		
8		26		22/05/2010	-394,293.48		

Required:

(a) Create a worksheet with the data displayed above. Use landscape format with a margin of 1" for top and bottom and 0.13" for left and right. Use 8pt font size for the content and align the content to fit into an A4-sized page. (8 marks)

(b) Loans below Sh.1,000,000 attract an interest rate of 13% per annum. Loans between Sh.1,000.000 and Sh.1.500.000 attract an interest rate of 12% and above this an interest rate of 11% per annum.

Use this criteria to populate the interest per annum (P.A) column. (4 marks)

(c) Given that the interest per annum is charged on the decreasing loan amount, use an appropriate function to calculate the monthly repayment amount into the relevant cells. (4 marks)

(d) Customers start repaying their loans on the 26th of the month after the loan starting date.

Calculate the difference in months against the amount paid and monthly instalments using a function, to determine the unpaid months. (4 marks)

(e) Use "First Name" and "Loan Amount" columns to create a pie chart with the title "Individual loan amount". (5 marks)

Save your workbook as "Mkopo" and print your work.

(Total: 25 marks)

QUESTION FIVE
Using a desktop publishing program, create the document shown below:

APPLICATION FOR REGISTRATION

1) Name to be registered
   (a) Company, Partnership or other body of persons

   (b) Sole proprietorship (Name of the Individual)

Surname	Middle	First

2) Trading/business name(s) if different from the registered above. *(if more than 3 please attach a separate list.)*

NOTES:

1) *Only one copy of this form is required.*

2) *All spaces must be completed and accurate information furnished. It is an offence under the Value Added Tax Act to give incorrect information.*

3) *If you have any difficulties in completing this form please contact your nearest VAT office.*

4) *Any changes to the details given must be notified to the Commissioner of VAT within 14 days of such change.*

5) *When completed this form is to be returned to:* **The Commisioner of VAT** *OR to your nearest VAT office.*

3) Personal Identification Number (P.I.N)

   Ltd Company ☐   Partnership ☐   Sole Proprietor ☐   Others ☐
   (Tick as applicable)

4) Full Address of principal place of business
   a) Postal Address

P. O. Box (incl postal code)	Town

   b) Physical Address

Street/Road	Area
Building	L/R No.

5) a) Area Code   Telephone No.   b) Area Code   Telephone No.

6) Date Business commenced or will commence
   Date/Month/Year

7) List Directors and Secretary for Limited Company, or for Partnership list (1) Principal or Managing Partner (2) other partners, or for Sole Proprietor give full name

   Personal Identification Number. (P.I.N)   Full Names

										Full Names

Save the publication as "Application" and print on one A4 sized paper.   **(20 marks)**

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