KASNEB

DICT LEVEL III

COMPUTER APPLICATIONS PRACTICAL II

MONDAY: 22 May 2017.   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 processor, create a new document and save it as "Question One".

Use "Question One" document to key in and save solutions to questions one (a) to (e) below:

(a)   (i)   Outline two disadvantages of using a combo box while working with database program.   (2 marks)

      (ii)   Define the concept of a nested query in database applications.   (2 marks)

(b)   Explain the following spreadsheet concepts:

      (i)   Adjustable cell.   (1 mark)

      (ii)   Add-ins.   (1 mark)

      (iii)   Breakpoint.   (1 mark)

(c)   Distinguish between "data marker" and "data point" as used in spreadsheet charts.   (2 marks)

(d)   Outline the significance of freeze panes feature in spreadsheet software.   (2 marks)

(e)   Explain why the following page layout details need to be considered when planning the basic layout of a publication:

      (i)   Focal point.   (2 marks)

      (ii)   Normal eye movement.   (2 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 questions (a) to (e) below:

(a)   Identify two mistakes that should be avoided when naming fields in a database table.   (2 marks)

(b)   Explain two parts of a database report.   (4 marks)

(c)   Highlight two roles of pivot tables in a spreadsheet application.   (2 marks)

(d)   Outline three advantages of internet-based computer applications.   (3 marks)

(e)   Define the following terms as used in desktop publishing:

    (i)   Hanging indent.   (2 marks)

    (ii)   Gutter.   (2 marks)

Save and print Question Two document.

(Total: 15 marks)

QUESTION THREE

The following tables are extracts of records kept in a health centre for patients, doctors and consultations respectively:

PATIENTS

Patient Number	Patient Name	Year of Birth	Gender
0020	John	1972	Male
0021	Paul	1980	Male
0022	Jean	1976	Female
0023	Alice	1986	Female

DOCTORS

Doctor Number	Doctor Name
0520	Charles
0528	Beatrice
0610	James
0718	Isaac

CONSULTATIONS

Consultation Number	Consultation date	Patient number	Doctor number	Ailment
101	07/05/2017	0020	0520	Flue
202	09/05/2017	0023	0528	Malaria
303	13/05/2017	0022	0610	Cough
405	14/05/2017	0021	0528	Malaria
507	15/05/2017	0020	0520	Flue
608	16/05/2017	0023	0528	Malaria
704	16/05/2017	0022	0610	Cough

(a)   (i)   Using a database application package, create a database file named "Health Centre".   (1 mark)

    (ii)   Create three tables named "Patients", "Doctors" and "Consultations" containing fields displayed on each table entries.   (3 marks)

    (iii)   Establish a relationship between the tables and print the relationship report.   (2 marks)

(b)   (i)   Create entry forms named "frmpatients", "frmdoctors" and "frmconsultations" for tables created in a(ii) above.   (3 marks)

    (ii)   Using the forms in b(i) above, populate the tables with the data given.   (6 marks)

(c)   Create a query named "Qryfilter" to display details of patients who consulted with Doctor James.   (2 marks)

(d)   (i)   Create a report called "Rptpatients" to display; patient's name, consultation dates, ailment and the names of doctors consulted.   (2 marks)
Print report Rptpatients

        (ii)   Group the records in "Rptpatients" report by patient's name.   (2 marks)
Print the grouped report.

(e)   Create a dashboard named "Home page" containing command buttons to open "frmpatients" and "frmconsultants" forms.   (4 marks)

Save "Health care" database and print "Qryfilter" query.

(Total: 25 marks)

QUESTION FOUR

Consider the data below and use it to answer the questions that follow:

	A	B	C	D	E	F	G	H
1	NO	STAFF NAME	REGION	OWNERSHIP	FAMILY MEMBERS	MONTHLY INCOME (SH.)	ANNUAL INCOME	HOUSE RENT
2	1	Ann	North	Own	1	1,000,000		
3	2	Ben	East	Own	5	2,000,000		
4	3	Catherine	West	Rent	2	130,000		
5	4	David	South	Rent	3	45,000		
6	5	Francis	North	Rent	3	65,000		
7	6	George	South	Own	4	150,000		
8	7	Henry	East	Rent	2	75,000		
9	8	Kelvin	North	Own	1	43,000		
10	9	Irene	East	Own	3	16,000		
11	10	Joseph	West	Rent	4	25,000		
12	Average Family Members							
13	Highest income							
14								

Required:

(a)   (i)   Using a spreadsheet software, create a workbook named "staff".   (2 marks)

        (ii)   Create a worksheet in the "staff" workbook and name it "staff salary". Capture and save the data given in the worksheet you have created.   (4 marks)

        (iii)   Calculate the average for "family members" column in cell E12.   (2 marks)

        (iv)   Compute the highest income in cell F13.   (2 marks)

(b)   (i)   Using an appropriate formula, compute the annual income for each individual in column G.   (3 marks)

        (ii)   Calculate the house rent for the staff who have rented houses. House rent is 10% of monthly income.   (3 marks)

(c)   (i)   Insert a bar chart displaying staff name along x axis and family members details along y axis.   (3 marks)

        (ii)   Place the legend on top of chart area.   (2 marks)

(d)   Insert a hyperlink in cell A14 of "staff salary" worksheet with the text "Display sheet2". The user should automatically display Sheet2 after clicking on it.   (2 marks)

(e)   On "sheet3" of your workbook, type the steps you could use to import data from a table in a database application.   (2 marks)

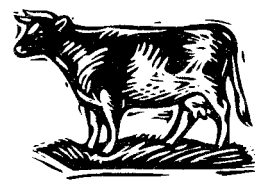Save "staff" workbook and print "staff salary" worksheet.

(Total: 25 marks)

QUESTION FIVE

Use a desktop publishing program to prepare the publication shown below:

XYZ ONE MONTH WORKSHOP

Tuesday **1**	Wednesday **16**
Wednesday **2**	Thursday **17**
Thursday **3**	Friday **18**
Friday **4**	Saturday **19**
Saturday **5**	Sunday **20**
Sunday **6**	Monday **21**
Monday **7**	Tuesday **22**
Tuesday **8**	Wednesday **23**
Wednesday **9**	Thursday **24**
Thursday **10**	Friday **25**
Friday **11**	Saturday **26**
Saturday **12**	Sunday **27**
Sunday **13**	Monday **28**
Monday **14**	Tuesday **29**
Tuesday **15**	Wednesday **30**
	Thursday **31**

AUGUST 2017

XYZ program empowers farmers to move from subsistence to commercial production.

Join us in empowering farmers and creating innovative agricultural solutions and sign up to learn more about agriculture, the farmers that inspire us and the tools that are helping them succeed.

XYZ Farmers Transforms Communities

XYZ has done pioneering work in helping the rural poor increase their incomes and achieve up to a 60 percent increase in certain crop yields. This has enabled smallholder farmers to improve their returns and invest more in their familys' health, nutrition and education".

The Agriculture Finance Initiative

XYZ program addresses key needs of smallholder farmers in rural Africa. The program provides:

- Agriculture-Specific Financial Tools – loans, savings, transformational training and insurance tailored to the unique needs of rural communities.

- Rural Outreach and Access – solving access challenges facing rural communities, bring the bank to the doorstep.

- Technological Leverage – utilising powerful Global Positioning System (GPS) technology to map each farmer's land.

SIGN UP NOW

NAME:..

PHONE:..

Email:..

Save the publication as XYZ program and print.

(Total: 20 marks)