2920/102B
COMPUTER APPLICATIONS I (PRACTICAL)
Paper 2
July 2017
Time: 1 hour

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE I

COMPUTER APPLICATIONS I (PRACTICAL)

Paper 2

1 hour

INSTRUCTIONS TO THE CANDIDATE

*You have **ten** minutes to read through the instructions and questions before starting the examination.*
Any problem with the computer should be reported to the invigilator immediately.
Direct any question(s) to the invigilator only. Conversing with fellow students may lead to disqualification.
*Write **your name** and **index number** on the **answer booklet** and the **rewritable CD**.*
*Type **your name** as a header on each sheet used.*
*This paper consists of **FOUR** tasks.*
*Perform any **TWO** tasks.*
*Each task carries **20** marks.*
Read the instructions of each task carefully.
Print on one side of the paper(s) only and use a fresh sheet of paper for each task.
*Hand over **printout** and the **rewritable CD** to the invigilator at the end of the examination.*
Candidates should answer the questions in English.

This paper consists of 12 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no tasks are missing.

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SPECIFIC INSTRUCTIONS TO CANDIDATE

1.   Create a folder named **KNECEXAM** on the desktop to store all the work done on this paper.

2.   Ensure that the **KNECEXAM** folder and all its content is burnt onto the **Rewritable CD** at the end of the examination.

TASK 1

(a)   (i)   Open a word processing program and key in the following text as it appears. *Save* the
           document as *SHMS* in the **KNECEXAM** folder.   (8 marks)

SMART HEALTH MANAGEMENT SYSTEM (SHMS)

SHMS helps consumers, providers and risk-bearers to coordinate and manage health and wellness across care settings. It helps drive optimal health outcomes, efficient healthcare spending and affordability. The system also enables new care delivery models that increase consumer and provider engagement. SHMS gives clients the deep subject matter knowledge and capabilities needed to address key challenges of today's healthcare environment:

SHMS enables organizations to reposition their businesses through top line revenue and growth strategies. These strategies minimize risk, and enables:	❖ Quality improvement ❖ Medical cost reduction ❖ Administrative cost reduction ❖ Revenue growth

    (ii)   Save the changes.   (½ mark)

(b)   Jude was admitted in Merry Hospital and incurred a huge hospital bill. She intends to invite friends for a fundraiser to assist in settling the bill.

      Open a new blank word processing document and create the following invitation card as it appears. *Save* the document as *Billcard* in the **KNECEXAM** folder.   (5 marks)
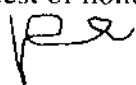
JUDES FUND RAISER

Dear Friends,

The organizing committee wishes to invite you for the fund raiser towards clearing Jude's hospital bill. It will be held on 15th August 2016 at the county hall, Eastern wing. Your presence and generous contribution will be highly appreciated.

Welcome

Guest of honors will be **YOU** and *ME*

Yours faithfully
Organizing secretary

Save the changes to printout later.

(c)   (i)   Open a new blank word processing document and create the following table as it appears. *Save* the document as *Revenuetable* in the **KNECEXAM** folder.   (2½ marks)

MEGHA ENTERPRISES REVENUE FOR THE THREE MONTHS				
	May	April	June	**Average Revenue**
Goods	655,000	671,000	658,000	
Services	275,000	283,000	280,000	
Total Revenue				

(ii)   Using a formula, calculate each of the following:

     I.   Total revenue for each of the three months;

     II.   Average revenue for the three months.   (2 marks)

(d)   Save the changes to print out later each of the following:

     (i)   SHMS;

     (ii)   Billcard;

     (iii)   Revenuetable.   (2 marks)

TASK 2

Figure 1 shows a worksheet extract of Esther's termly budget. Use it to answer the questions that follow.

(a)   (i)   Open a spreadsheet program and key in the data in sheet 1 as it appears. Save the workbook as *Ebudget* in the **KNECEXAM** folder.   (4 marks)

TERMLY BUDGET				
Expenses	**Month**			
Personal	**January**	**February**	**March**	**April**
Rent	15000	15000	15000	15000
Electricity	2000	2500	2300	2100
Phone	600	1000	850	900
Food	3500	4000	3800	4600
Water	350	600	700	450
Laundry	2000	2300	1800	2300
Gas	2200	2250	2100	2150
TOTAL EXPENSES				
Income	**January**	**February**	**March**	**April**
Earnings	45000	45000	45000	45000
Overtime	6000	7500	5500	8000
Total Income				
Highest Income				
Lowest Expense				

Figure 1

(ii)   Using a function and cell references only, calculate each of the following:

      I.   Total expenses for each month;

      II.   Total income for each month.   (2 marks)

(iii)   Format all the values as numbers, using a *1000* separator.   (1 mark)

(iv)   Create an embedded column chart showing *Total income* and *Total expenses* for the four months.   (2 marks)

(v)   Use a function to display the value for each of the following for the three months:

      I.   the highest income;

      II.   the lowest expenses.   (1 mark)

(b) Figure 2 shows a worksheet extract of stock items for New Qwish Enterprise Ltd. Use it to answer the questions that follow.

NEW QWISH ENTERPRISE					
ITEM	CATEGORY	PRICE PER ITEM	Quantity in Stock	Stock Value	New Price Per Item
Table	Furniture	1850	5		
Plates	Utensils	500	200		
Wardrobe	Furniture	3550	4		
Dinner cups	Utensils	300	150		
Mats	Cloth	250	25		
Chairs	Furniture	1500	20		
Curtains	Cloth	2000	10		
Price Discount	10%				
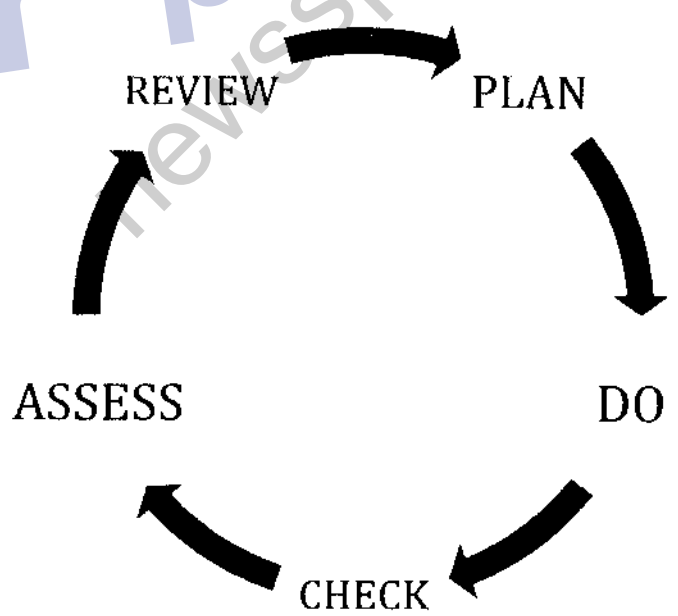
Figure 2
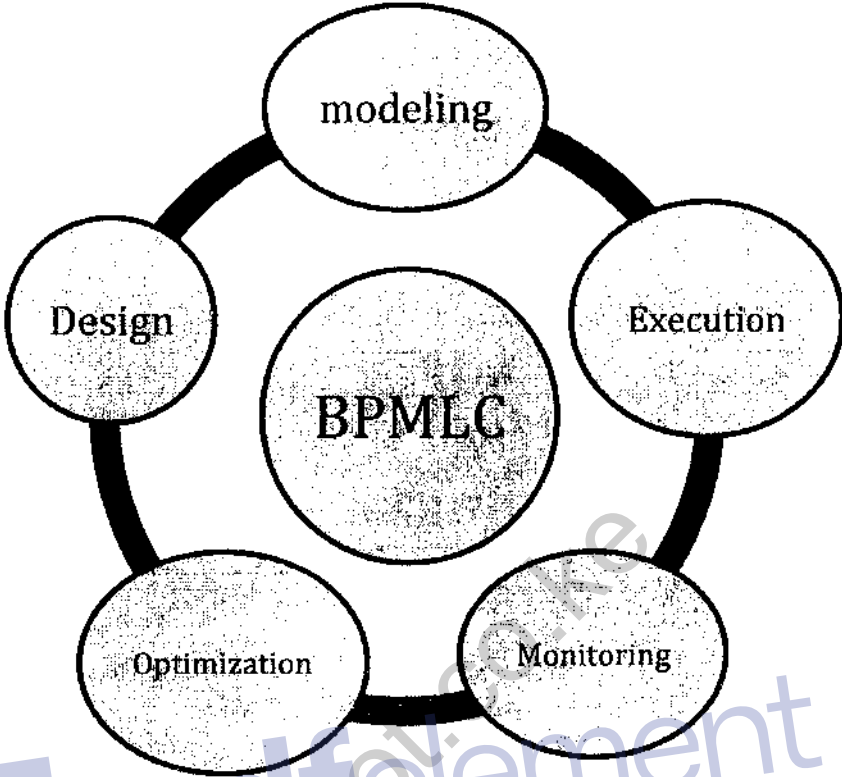
(i) Enter the data as it appears in Sheet2 of the *Ebudget* workbook. (2 marks)

(ii) Using an appropriate function and cell addresses only, determine the *Stock Value* of each item. (1 mark)

(iii) Assume that each item is discounted at 10%, using cell referencing only, determine the new price per item. (2 marks)

(c) Using the subtotal function, determine the stock value of each category of items. (2 marks)

(d) (i) Copy the contents of Sheet2 to Sheet3 in cell range A1:F15. (½ mark)

(ii) Name the range as Qwishstock. (½ mark)

(iii) Format the range named Qwishstock as follows:

I. apply an outline boarder to the range;

II. apply a 45 degrees alignment to the column headings. (1 mark)

(e) Save the changes on sheet3 to print out later. (1 mark)
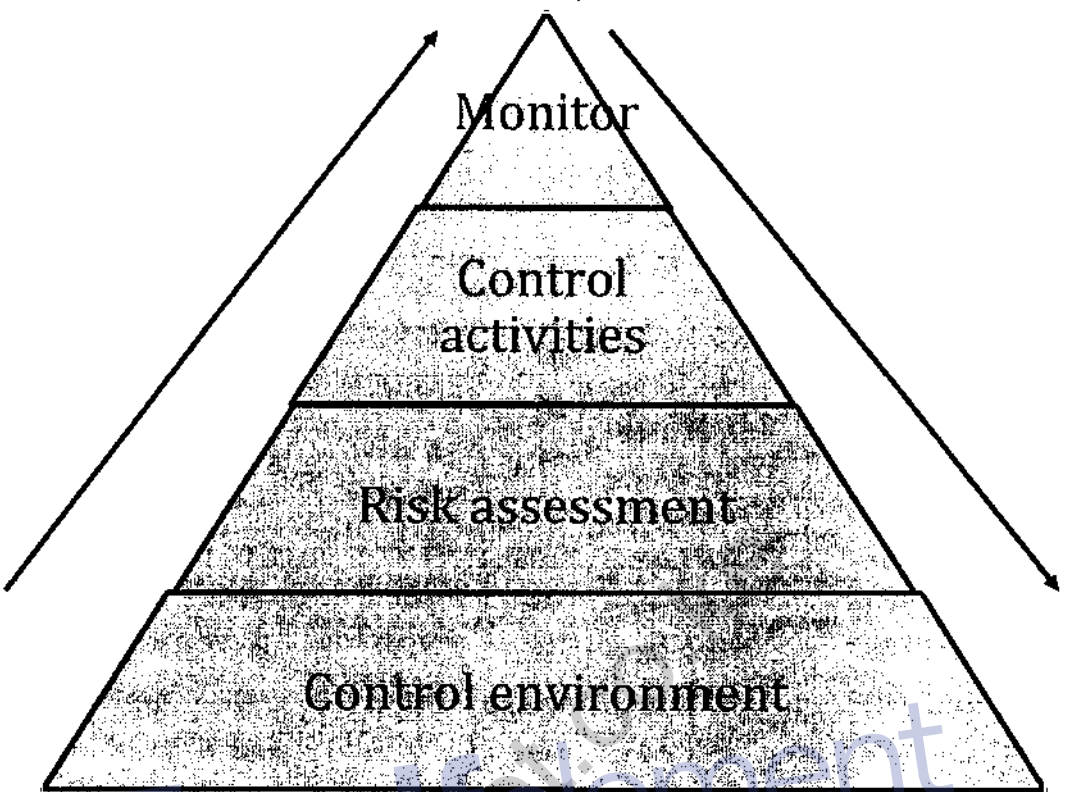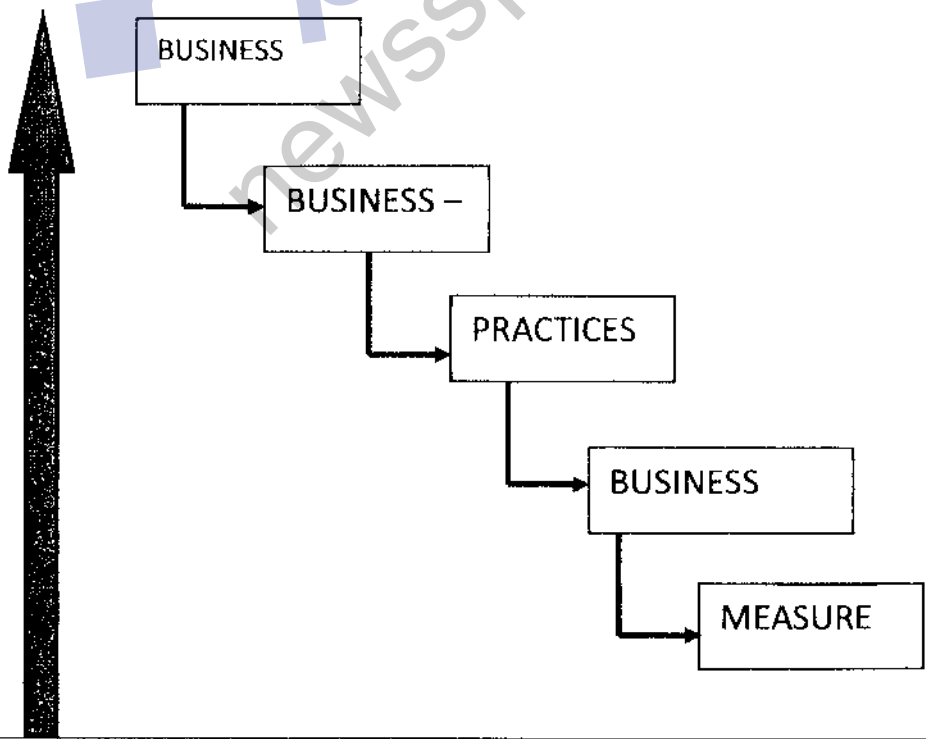
TASK 3

Patricia intends to give a talk about *Business Process Management* to a group of managers. You have been tasked to prepare the slides as outlined in Figure 4.

a) (i) Open a presentation program and create the slides as they appear. Save the presentation as BPM in the **KNECEXAM** folder. (12 marks)

    (ii) Use appropriate slide layout for the presentation. (1 mark)

Slide No	Contents
1	**BUSINESS PROCESS MANAGEMENT** BY: JKG
2	Definition ♦ Process management is the collection of activities of planning and monitoring the performance of a business process. ♦ It refers to the management of business processes and manufacturing processes.
3	PROCESS MANAGEMENT ACTIVITIES REVIEW PLAN ASSESS DO CHECK

4	Business process management life cycle
5	Business process management technology (BPM)
	Components of a BPM : • Process engine • Business analytics • Content management • Collaboration tools
6.	ADVANTAGES AND DISADVANTAGES OF BPM

ADVANTAGES AND DISADVANTAGES OF BPM

Advantages	Disadvantages
✓ Improved Business Agility ✓ Reduced Costs and Higher Revenues ✓ Higher Efficiency ✓ Better Visibility ✓ Compliance, Safety and Security	❖ Reduced employee morale ❖ The prioritization of one department over others ❖ Failure during implementation

7

Internal control process model

Monitor

Control
activities

Risk assessment

Control environment

8

BPM Critical Success Factors

BUSINESS

BUSINESS –

PRACTICES

BUSINESS

MEASURE

9

THE END

(b)   Insert the following to all the slides:

    (i)   Footer as "Business Process Management";

    (ii)   slide number.   (2 marks)

(c)   Apply the following transition properties to all slides:

    (i)   slide transition of your choice;

    (ii)   transition speed: *slow*;

    (iii)   Slide design of your choice.   (3 marks)

(d)   Save the changes and print the presentation as *handout* with three slides per page.   (2 marks)

TASK 4

Digital Automobile Ltd Company sells different types of vehicles. The Owner has requested you to prepare a database for his business for better record management.

(a)   (i)   Open a database program and create a database file named XYZ in the **KNECEXAM** folder.   (1 mark)

    (ii)   Create the following tables in the database file created. Save them as *tblvehicle*, *customertbl* and *tblpayment* respectively.   (3 marks)

Vehicle Details Table

Field Name	Data Type	Field Size/other details
Vehicle_RegNo	Text	10
Vehicle_Type	Text	15
Vehicle_Make	Text	20
Vehicle_Price	Currency	

Customer Details Table

Field Name	Data Type	Field Size/other details
Customer_ID	Text	10
Customer_Name	Text	50
Customer_Address	Number	Integer
Customer_Town	Text	25
Vehicle_RegNo	Text	10

Payment Table Details

Field Name	Data Type	Field Size/other details
Customer_Name	Text	50
Vehicle_RegNo	Text	10
Vehicle_Price	Currency	
Amount_Paid	Currency	

    (iii)   Create an appropriate relationship between *tblvehicle* and *customertbl*.   (2 marks)

(b)   (i)   Create forms for each of the tables to be used to enter data. Save the forms as *frmvehicle*, *frmcustomer* and *frmpayment* respectively.   (3 marks)

    (ii)   Using the forms created in (i), enter the following data into their respective tables.   (3 marks)

Vehicle Details

Vehicle Reg No	Vehicle Type	Vehicle Make	Vehicle Price
KAM 201	Matatu	Nissan	1,300,000
KAM 202	Bus	Mazda	2,500,000
KAM 203	Saloon	Toyota	800,000
KAM 204	Pick up	Peugeot	1,000,000
KAM 205	Lorry	Isuzu	3,000,000
KAM 206	Pick up	Toyota	1,800,000
KAM 207	Bus	Scania	7,500,000

Customer Details

Customer ID	Customer Name	Customer Address	Customer Town	Vehicle Reg No
B1001	Peter	254	Nakuru	KAM 201
B1002	John	678	Eldoret	KAM 202
B1003	Ken	963	Nairobi	KAM 203
B1004	David	147	Nakuru	KAM 204
B1005	Roy	456	Bungoma	KAM 205
B1006	Glen	789	Webuye	KAM 206
B1007	Jonathan	546	Nairobi	KAM 207

Payment Details

Buyer Name	Vehicle Reg No	Vehicle price	Amount paid
Peter	KAM 201	1,200,000	800,000
John	KAM 202	2,400,000	2,000,000
Jonathan	KAM 207	7,500,000	7,500,000
Ken	KAM 203	800,000	600,000
David	KAM 204	1,000,000	700,000
Roy	KAM 205	3,000,000	2,000,000
Glen	KAM 206	1,800,000	1,600,000

(iii) Create a query to calculate the payment balance of the vehicles given that the balance is vehicle price minus amount paid. Save the query as *qrybalance*.

(3 marks)

(iv) Create a report to display the customer name, vehicle_RegNo and Payment balance for the vehicles whose payment balance is zero. Save the report as *rptcleared*. (3 marks)

(c) Print each of the following:

(i) qrybalance;

(ii) rptcleared. (2 marks)

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