

**Informatics Practices (065)**  
**Sample Question Paper –3**

Note

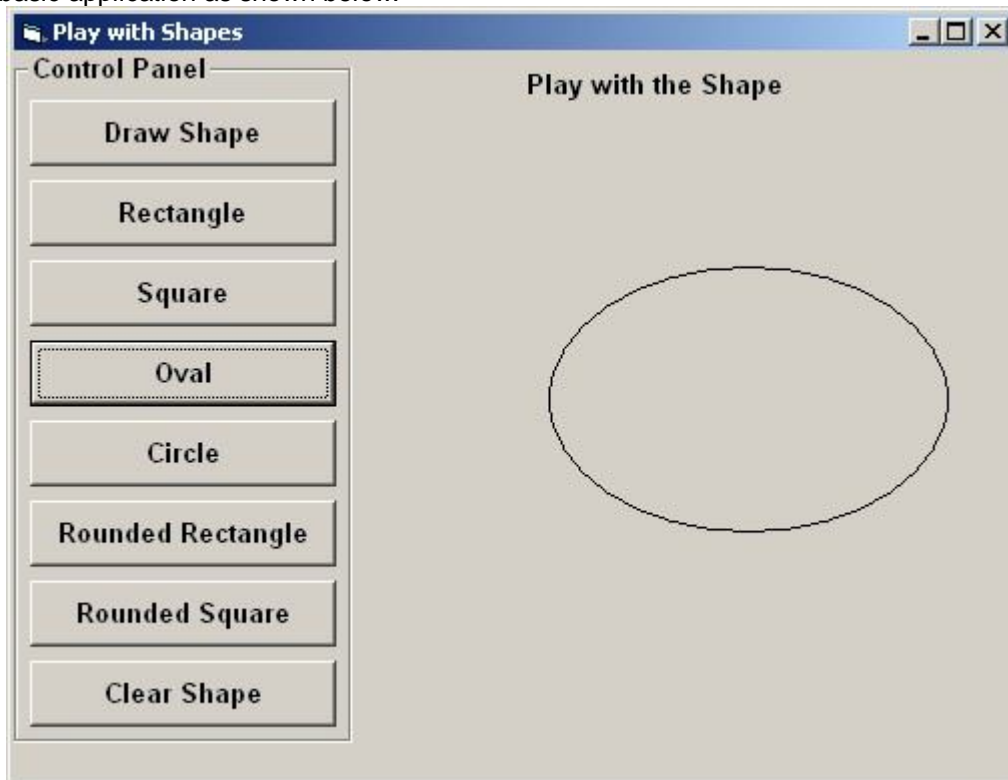
1. This question paper is divided into three sections.
2. All questions are compulsory.
3. Section – A consists of 30 marks.
4. Section – B and Section – C are of 20 marks each
5. Answer the questions after carefully reading the text.

<b>Section – A</b>			
Q1.	Answer the following questions:		
	(a)	Explain the term FLOSS	2
	(b)	Differentiate between ER Modeling and Object Modeling Techniques.	2
	(c)	Define the following terms in the context of Database (i) Relation (ii) Tuple	2
	(d)	Name two areas in industries where business computing can be applied. Describe application of business computing in those industries.	4
Q2	Answer the following questions:		
	(a)	How do we specify comments in visual basic? How do we break a long line of code to a new line?	2
	(b)	Write the steps in Program Solving Methodology. Give a suitable example showing use of Problem Solving Methodology.	4
	(c)	Explain the following Terms (i) Modular Programming (ii) Object Oriented Programming (iii) Event Driven Programming (iv) RAD	4
Q3	Answer the following questions:		
	(a)	State the differences between SQL and PL/SQL.	2
	(b)	Differentiate between Cursors and Triggers.	2
	(c)	“NULL is not Equal to a NUL” do you agree with the statement. State reason.	2
	(d)	What are PL/SQL blocks? How many types of PL/SQL block definition exist? Explain with suitable examples.	4

**Section – B**

Q4

Mr. C D Sharma learnt elementary visual basic programming and started making an application for his 7-year-old kid. He made an application for viewing different type of shapes. Initially he designed the basic application as shown below.



Object Type	Object Name	Description
Form	frmPlayForm	The Main Form Object
Command Button	cmdDrawShape	Command buttons to draw the respective shapes and clear the form.
	cmdRectangle	
	cmdSquare	
	cmdOval	
	cmdCircle	
	cmdRoundedRectangle	
	cmdRoundedSquare	
	cmdClearShape	
Label	lblPlayWithShape	
Shape	shpPlay	The Shape object.

		<p>Now he wants to exercise some control over the command buttons displayed in the form. His requirements are listed as below</p> <p><b>Requirement 1:</b> Enable Draw Shape command button and disable all other Command Button Controls in the beginning. Also the form should not have any shape displayed.</p> <p><b>Requirement 2:</b> On Clicking Draw Shape command button, all the command buttons except Draw Shape command button should be enabled.</p> <p><b>Requirement 3:</b> On clicking command buttons Rectangle, Square, Oval, Circle, Rounded Rectangle, Rounded Square the respective shape should be displayed.</p> <p><b>Requirement 4:</b> On Clicking Clear Shape command button the status of requirement 1 should be resumed.</p>	
	(a)	Write a procedure DrawShape to set the properties of shape object shpPlay as height = 2000, width = 3000, top = 1500 and left = 4000. The shape should be displayed after setting these parameters.	2
	(b)	Write a procedure DisableControl to disable the controls as per requirements in 1 and 3.	2
	(c)	Write a procedure EnableControl to enable the controls as per requirement in 2.	2
	(d)	Write code for requirement number 3	2
	(e)	Write the code statement required for requirement number 4	2
Q5	(a)	Write the output of the following	2
		<pre> j = 10 FOR i = 1 TO 4     x = i * j     PRINT x     j = j - 2 NEXT I </pre>	
	(b)	Rewrite the corrected program after removing syntax errors, underline the corrections	2
		<pre> PRIVATE SUB Command1_Click() Dim P=1 as integer, C as integer FOR C=1 UPTO 10     P = P+1     IF P = 5 THEN         P = 1         DISPLAY "P is equal to 5"     ELSE         DISPLAY "P is not equal to 5"     LOOP C </pre>	

	(c) Rewrite the following code using IF .. ELSE without effecting the output of the code:	2
	<pre> DIM Percentage AS Integer Percentage = val(txtpercent.Text) SELECT CASE Percentage CASE 60 TO 100 txtcategory.Text = "Excellent" CASE 40 TO 59 txtcategory.Text = "Very Good" CASE ELSE txtcategory.Text = "Need to work hard" END SELECT </pre>	
	(d) Write the following code segment using FOR... LOOP without effecting the output of the code:	2
	<pre> Num=6 Temp=Num DO WHILE Num&gt;=1 Temp=Temp-1 IF Temp MOD 2 = 0 THEN PRINT Temp, " is Even" ELSE PRINT Temp, " is Odd" END IF Num=Num-2 LOOP </pre>	
	(e) Write the output that the following code segment:	2
	<pre> First = "Education" Second = "cat" PRINT First + "@" + Second PRINT INSTR(First, Second) PRINT Mid(LCASE(First), 4, 3) PRINT INT(18.2) + LEN(Second) </pre>	

Section C		
6	Answer the following questions	
(a)	<pre> DEPTNO DNAME          LOC -----  10 ACCOUNTING      NEW YORK  20 RESEARCH        DALLAS  30 SALES            CHICAGO  40 OPERATIONS      BOSTON </pre> <p>Look at the above Dept table and give the output produced by the following PL/SQL code on execution:</p> <pre> DECLARE     v_DeptID      Dept.DeptNo%TYPE := 10;     v_DeptName    Dept.DName%Type;     v_Counter     NUMBER (2) := 1; BEGIN LOOP     SELECT DName INTO v_DeptName FROM Dept WHERE DeptNo = v_DeptID ;     DBMS_OUTPUT.PUT_LINE (v_DeptName);     v_DeptID := v_DeptID + 10     v_Counter := v_Counter + 1     EXIT WHEN v_Counter &gt; 3; END LOOP; END; </pre>	2
(b)	<p>Write the output of the following PL/SQL code segment</p> <pre> DECLARE     Msg CHAR(3) := 'Welcome'; BEGIN     FOR C IN 1..3     LOOP         DBMS_OUTPUT.PUT_LINE (SUBSTR (Msg, -3, C));     END LOOP ; END; </pre>	2
(c)	<p>Write the output of the following PL/SQL code segment</p> <pre> BEGIN     FOR i IN REVERSE 1..6     LOOP         IF MOD (i, 2)=0 THEN             DBMS_OUTPUT.PUT_LINE (TO_CHAR (i*10));         END IF;     END LOOP; END; </pre>	2
(d)	<p>Write a PL/SQL function MyAddition which will accept two arguments of number type and returns the sum of both values.</p>	4

Q7	Use the following structure of Customer table to answer the following questions						
	<b>Column Name</b>	Cust_ID (Primary Key)	Cust_Name	Cust_Add1	Cust_Add2	Pin_Code	Cust_Phone
	<b>Data type</b>	NUMBER	VARCHAR2	VARCHAR2	VARCHAR2	NUMBER	VARCHAR2
	<b>Length</b>	7	30	20	30	6	10
	(a)	Write the SQL Command to create the above table including its Constraints					2
	(b)	Write a PL/SQL code to modify all the CUST_PHONE numbers by joining '2' before each phone number if it contains 7 characters.					2
	(c)	Write a PL/SQL code to modify all the CUST_PHONE numbers by removing '2' if it starts with '2'.					2
	(c)	Write PL/SQL code to create two Statement level triggers TrigBeforeUpdateCustomer and TrigAfterUpdateCustomer before and after UPDATE statement respectively on the table Customer which signals 'Starting Update' to signify that modification of records has started and 'End of Update' message to signify that modification is over.					4

**Informatics Practices (065)**  
**Sample Question Paper –3**

Note

6. This question paper is divided into three sections.
7. All questions are compulsory.
8. Section – A consists of 30 marks.
9. Section – B and Section – C are of 20 marks each
10. Answer the questions after carefully reading the text.

**Section – A**

Q1. Answer the following questions:

- (a) Explain the term FLOSS

2

Ans: **FLOSS:** Free/Libre/Open Source Software, the term most commonly used when talking about either Free (Libre) Software or Open Source Software.

**PYTHON** is freeware open-source cross-platform interpreted scripting language that can be used for many kinds of software development.

**(1 mark each for each definition)**

- (b) Differentiate between ER Modeling and Object Modeling Techniques.

2

Ans: In ER Modeling ,an Entity is used to model a physical thing in question but in Object Modeling technique it is treated as Object. The collection of similar entities is termed as Entity Set but common collection of objects refers to a repository called Class.

**(2 marks for the correct difference)**

- (c) Define the following terms in the context of Database

2

(iii) Relation

(iv) Tuple

Ans: Relation is the term used to denote a Table. It is the other name given to Table.  
Tuple is also called as record, it is the row of a table  
In the following example the Relation is Dept and there are four tuples in it.

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

**(1 mark each for each definition)**

- (d) Name two areas in industries where business computing can be applied. Describe application of business computing in those industries.

4

Ans: In Banking we can use Business Computing for logging and maintaining daily transactions and reporting requirements.

In Financial Accounting of small scale or large scale industries for entering transactions of financial nature and generation of Ledgers, Vouchers, P&L A/C, Balance Sheet etc.

**(1 mark each for naming two areas)**

**(1 mark each for describing application)**

Q2 Answer the following questions:

- (a) How do we specify comments in visual basic? How do we break a long line of code to a new line?

2

Ans: For comments we can use Single Quotation mark character (') .  
For breaking a long line of code to the next line we use \_(underscore) character.  
For Example:  
' This is a Comment in Visual Basic  
MsgBox "Here the Line Breaks into" &\_  
"New Line in code window"

**(1 mark each for both the parts of question)**

(b) Write the steps in Program Solving Methodology. Give a suitable example showing use of Problem Solving Methodology. 4

Ans:

1. Identify the problem
2. Propose Solutions
3. Identify a suitable solution
4. Write the Code
5. Test the solution
6. Deliver the solution

For Example  
Task: Write a code segment to find out whether a number is Even or Odd

1. Identify the problem  
The task is to check a number for Even or Odd
2. Propose Solutions  
There is one Solution which requires checking of the number to be divisible by 2 if it is then is a Even number otherwise it is a Odd number
3. Identify a suitable solution  
The proposed solution is ideal for this task
4. Write the Code  
Dim N as Integer  
N=13  
IF N Mod 2 =0 Then  
    MsgBox "Even Number"  
Else  
    MsgBox "Even Number"  
End If
5. Test the solution  
Test the above code for different values of N and then finally
6. Deliver the solution

**(½ mark each for all 6 steps)  
(1 mark for a suitable example)**

(c) Explain the following Terms 4

- (v) Modular Programming
- (vi) Object Oriented Programming
- (vii) Event Driven Programming
- (viii) RAD

Ans:

- (i) Modular Programming  
An approach of dividing a big programming task into small manageable program modules
- (ii) Object Oriented Programming  
A programming technique used to program with Object Oriented Programming languages and follows object oriented programming paradigms.
- (iii) Event Driven Programming  
In this type of programming the Events plays major role to execute a set of program code. Events are the actions such as Mouse Click, Double Click, Key Press etc.
- (iv) RAD

Rapid Application Development is the current programming approach in which a prototype (or sample model) of the software application is made much before its actual implementation to give a feel of application before starting working with the actual code behind the application.

**(1 mark each for each brief explanation)**

Q3 Answer the following questions:

(a) State the differences between SQL and PL/SQL.

2

Ans: SQL is called Structured Query Language and PL/SQL is called the Programming Language in SQL. SQL does not supports Decision Making and Looping constructs while PL/SQL does support all these features and also exploits benefits of SQL Commands in it.

**(2 marks for stating any 2 correct differences)**

(b) Differentiate between Cursors and Triggers.

2

Ans: Cursors are the work areas for SQL SELECT statements to fetch records from a database table and work with each record on record-by-record basis.

Triggers supports event based execution of code statements in database. A trigger gets initiated on the events such as Updating of records, Deletion of records etc. and can be triggered on Statement Level or Row Level.

**(2 marks for the correct difference)**

(c) "NULL is not Equal to a NUL" do you agree with the statement. State reason.

2

Ans: A NULL is not equal to a NULL", I agree with the statement as NULL is a value that is not present and is a missing value, which cannot be compared to any other value unless it is substituted with some value. So Null is never equal to anything, not Even NULL.

**(2 marks for stating the correct reason)**

(d) What are PL/SQL blocks? How many types of PL/SQL block definition exist? Explain with suitable examples.

4

Ans: PL/SQL block is a set of PL/SQL statements, which can be executed to perform some identifiable task  
Following are the PL/SQL Block types with general syntax

**Anonymous:** PL / SQL Block without any name

**Syntax for Declaring an Anonymous PL/SQL Block**

```
[DECLARE]
BEGIN
--Statements

[EXCEPTION]

END;
```

**Procedure:** Sub programs, which can take arguments.

**Syntax for Declaring a Procedure**

```
CREATE OR REPLACE PROCEDURE proc_name
IS
BEGIN
--Statements

[EXCEPTION]

END;
```

**Function:** A function is similar to a procedure and must return a value.

**Syntax for Declaring a Function**

```
CREATE OR REPLACE FUNCTION name
RETURN datatype
IS
BEGIN
--Statements
RETURN value;

[EXCEPTION]

END;
```

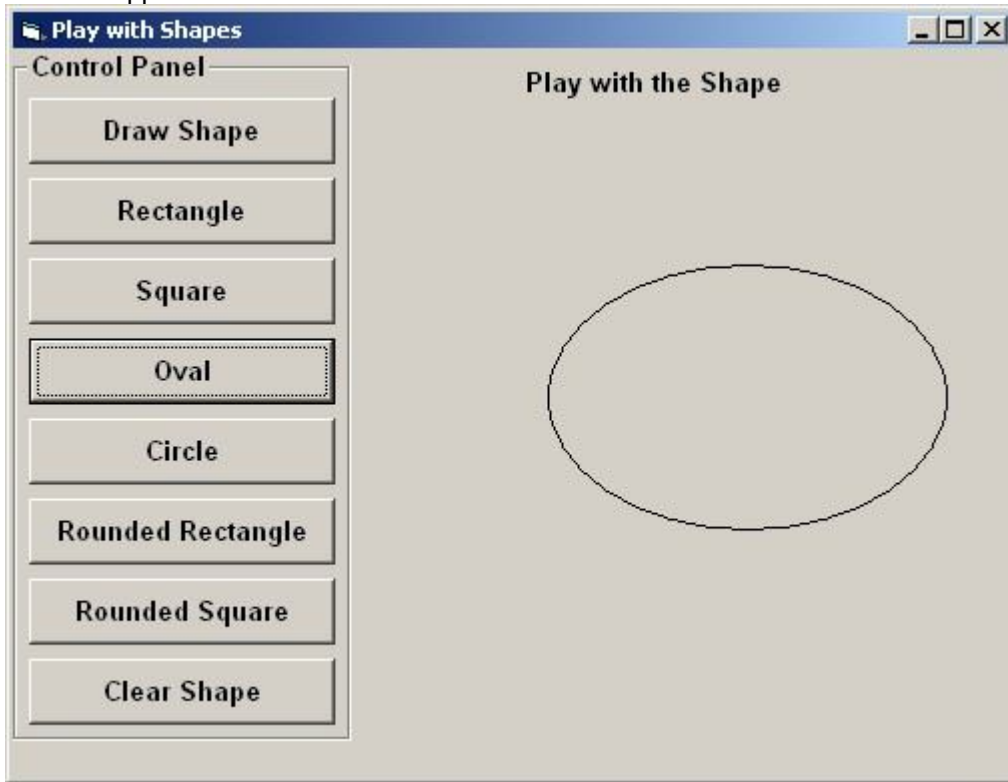
*(1 mark for correct definition)*

*(1 mark for naming all 3 types of PL/SQL blocks)*

*(2 marks for giving example of each type)*

**Section – B**  
Q4

Mr. C D Sharma learnt elementary visual basic programming and started making an application for his 7-year-old kid. He made an application for viewing different type of shapes. Initially he designed the basic application as shown below.



Object Type	Object Name	Description
<b>Form</b>	frmPlayForm	The Main Form Object
<b>Command Button</b>	cmdDrawShape	Command buttons to draw the respective shapes and clear the form.
	cmdRectangle	
	cmdSquare	
	cmdOval	
	cmdCircle	
	cmdRoundedRectangle	
	cmdRoundedSquare	
	cmdClearShape	
<b>Label</b>	lblPlayWithShape	
<b>Shape</b>	shpPlay	The Shape object.

Now he wants to exercise some control over the command buttons displayed in the form. His requirements are listed as below

**Requirement 1:** Enable Draw Shape command button and disable all other Command Button Controls in the beginning. Also the form should not have any shape displayed.

**Requirement 2:** On Clicking Draw Shape command button, all the command buttons except Draw Shape command button should be enabled.

**Requirement 3:** On clicking command buttons Rectangle, Square, Oval, Circle, Rounded Rectangle, Rounded Square the respective shape should be displayed.

**Requirement 4:** On Clicking Clear Shape command button the status of requirement 1 should be resumed.

- (a) Write a procedure DrawShape to set the properties of shape object shpPlay as height = 2000, width = 3000, top = 1500 and left = 4000. The shape should be displayed after setting these parameters. 2

```
Ans: Private Sub DrawShape ()
      shpPlay.Height =2000
      shpPlay.Width=3000
      shpPlay.Top=1500
      shpPlay.Left=4000
      shpShape.Visible =True
End Sub
```

*(½ mark for setting height and width of shape)*

*(½ mark for setting Top)*

*(½ mark for setting Left)*

*(½ mark for displaying the shape)*

- (b) Write a procedure DisableControl to disable the controls as per requirements in 1 and 3. 2

```
Ans Private Sub DisableControl ()
      cmdDrawShape.Enabled = True
      cmdRectangle.Enabled =False
      cmdSquare.Enabled =False
      cmdOval.Enabled =False
      cmdCircle.Enabled =False
      cmdRoundedRectangle.Enabled =False
      cmdRoundedSquare.Enabled =False
      cmdClearShape.Enabled =False
      ShpPlay.Visible =False
End Sub
```

*(1 mark for fulfilling Requirement 1)*

*(1 mark for fulfilling Requirement 3)*

- (c) Write a procedure EnableControl to enable the controls as per requirement in 2. 2

Ans:

```
Private Sub EnableControl ()  
    cmdDrawShape.Enabled = False  
    cmdRectangle.Enabled = True  
    cmdSquare.Enabled = True  
    cmdOval.Enabled = True  
    cmdCircle.Enabled = True  
    cmdRoundedRectangle.Enabled = True  
    cmdRoundedSquare.Enabled = True  
    cmdClearShape.Enabled = True  
    ShpPlay.Visible = False
```

End Sub

**(1 mark for enabling all command buttons except DrawShape)**

**(1 mark for disabling DrawShape command button)**

(d) Write code for requirement number 3

2

Ans: The following code statement is to be embedded in the click event of each of the respective command button with the respective shape name (Such as vbShapeRectangle, vbShapeSquare etc.) For the Click event of Command Button cmdRectangle we will write the code fragment in it.

```
shpPlay.Shape = vbShapeRectangle  
shpPlay.Visible = True
```

**(1 mark each for both the statements.)**

(e) Write the code statement required for requirement number 4

2

Ans: DisableControl

Or

```
cmdDrawShape.Enabled = True  
cmdRectangle.Enabled = False  
cmdSquare.Enabled = False  
cmdOval.Enabled = False  
cmdCircle.Enabled = False  
cmdRoundedRectangle.Enabled = False  
cmdRoundedSquare.Enabled = False  
cmdClearShape.Enabled = False  
ShpPlay.Visible = False
```

**(½ mark for enabling DrawShape command button)**

**(½ mark for disabling all other command buttons except DrawShape)**

**(1 mark for not displaying any shape on form)**

Q5 (a) Write the output of the following

2

```
j = 10  
FOR i = 1 TO 4  
    x = i * j  
    PRINT x  
    j = j - 2  
NEXT I
```

Ans: **Output:**

10  
16  
18  
16

*½ mark for each line of correct output*

(b) Rewrite the corrected program after removing syntax errors, underline the corrections

2

```
PRIVATE SUB Command1_Click()  
Dim P=1 as integer, C as integer  
FOR C=1 UPTO 10  
    P = P+1  
    IF P = 5 THEN  
        P = 1  
        DISPLAY "P is equal to 5"  
    ELSE  
        DISPLAY "P is not equal to 5"  
    LOOP C
```

Ans:

```
PRIVATE SUB Command1_Click()  
Dim P,C as integer  
P =1  
FOR C=1 TO 10  
    P = P+1  
    IF P = 5 THEN  
        P = 1  
        PRINT "P is equal to 5"  
    ELSE  
        PRINT "P is not equal to 5"  
    ENDIF  
NEXT C
```

*(½ mark each for correction of any 4 errors(Both the PRINTs to be treated as one correction))*

- (c) Rewrite the following code using IF .. ELSE without effecting the output of the code: 2

```
DIM Percentage AS Integer
  Percentage = val(txtpercent.Text)
  SELECT CASE Percentage
    CASE 60 TO 100
      txtcategory.Text ="Excellent"
    CASE 40 TO 59
      txtcategory.Text ="Very Good"
    CASE ELSE
      txtcategory.Text ="Need to work hard"
  END SELECT
```

Ans:

```
If Percentage >=60 AND Percentage < = 100 Then
  txtcategory.Text ="Excellent"

Elseif Percentage >= 40 Then
  txtcategory.Text ="Very Good"
Else
  txtcategory.Text ="Need to work hard"

End If
```

*( ½ mark for IF statement)*  
*( ½ mark for correct ELSEIF statement)*  
*( ½ mark for ELSE statement)*  
*( ½ mark for END IF statement)*

- (d) Write the following code segment using FOR... LOOP without effecting the output of the code: 2

```
Num=6
Temp=Num
DO WHILE Num>=1
  Temp=Temp-1
  IF Temp MOD 2 = 0 THEN
    PRINT Temp," is Even"
  ELSE
    PRINT Temp," is Odd"
  END IF
  Num=Num-2
LOOP
```

Ans:

```
Num=6
Temp=Num

FOR NUM = 6 TO 1 STEP -2
Temp=Temp-1
  IF Temp MOD 2 = 0 THEN
    PRINT Temp, " is Even"
  ELSE
    PRINT Temp, " is Odd"
  END IF
NEXT NUM
```

*(½ mark for correct FOR statement)*

*(½ mark for using correct Step)*

*(½ mark for using correct NEXT statement)*

*(½ mark for the body of loop)*

(e) Write the output that the following code segment:

2

```
First = "Education"
Second = "cat"
PRINT First + "@" + Second
PRINT INSTR(First, Second)
PRINT Mid(LCASE(First), 4, 3)
PRINT INT(18.2) + LEN(Second)
```

Ans: **Output:**

```
Education@cat
4
Cat
21
```

*(½ mark for each line of correct output)*

**Section C**

6 Answer the following questions

(a)

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

2

Look at the above Dept table and give the output produced by the following PL/SQL code on execution:

```
DECLARE
    v_DeptID      Dept.DeptNo%TYPE := 10;
    v_DeptName    Dept.DName%Type;
    v_Counter     NUMBER (2) := 1;
BEGIN
LOOP
    SELECT DName INTO v_DeptName FROM Dept WHERE DeptNo = v_DeptID ;
    DBMS_OUTPUT.PUT_LINE (v_DeptName);
    v_DeptID := v_DeptID + 10
    v_Counter := v_Counter + 1
    EXIT WHEN v_Counter > 3;
END LOOP;
END;
```

Ans: **Output:**

ACCOUNTING  
RESEARCH  
SALES

*1 mark for first line of output*

*1 mark each for second and third line of output.*

(b) Write the output of the following PL/SQL code segment

2

```
DECLARE
    Msg CHAR(10) := 'Welcome';
BEGIN
    FOR C IN 1..3
    LOOP
        DBMS_OUTPUT.PUT_LINE (SUBSTR (Msg, 1, C));
    END LOOP ;
END;
```

Ans: **Output:**

W  
We  
Wel

*1 mark for first line of output*

*1 mark each for second and third line of output.*

(c) Write the output of the following PL/SQL code segment

2

```
BEGIN
  FOR i IN REVERSE 1..6
  LOOP
    IF MOD (i, 2)=0 THEN
      DBMS_OUTPUT.PUT_LINE (TO_CHAR (i*10));
    END IF;
  END LOOP;
END;
```

Ans:

60  
40  
20

**(1 mark for first line of output)**

**(1 mark each for second and third line of output.)**

(d) Write a PL/SQL function MyAddition which will accept two arguments of number type and returns the sum of both values. 4

Ans:

```
CREATE OR REPLACE FUNCTION MySum (V_NumA IN NUMBER, V_NumB IN NUMBER)
RETURN NUMBER AS
V_Sum NUMBER;
BEGIN
  V_Sum := V_NumA + V_NumB;
  RETURN V_Sum;
END;
```

**(1 mark for header of Function)**

**(1 mark for using correct arguments and their data type)**

**(1 mark for calculating sum )**

**(1 mark for Returning the sum)**

Q7 Use the following structure of Customer table to answer the following questions

Column Name	Cust_ID (Primary Key)	Cust_Name	Cust_Add1	Cust_Add2	Pin_Code	Cust_Phone
Data type	NUMBER	VARCHAR2	VARCHAR2	VARCHAR2	NUMBER	VARCHAR2
Length	7	30	20	30	6	10

(a) Write the SQL Command to create the above table including its Constraints

2

Ans:

```
CREATE TABLE Customer (
  Cust_ID      NUMBER(7) PRIMARY KEY,
  Cust_Name    VARCHAR2 (30),
  Cust_Add1    VARCHAR2 (20),
  Cust_Add2    VARCHAR2 (30),
  Pin_Code     NUMBER (6),
  Cust_Phone   VARCHAR2 (10));
```

**(1/2 mark for CREATE TABLE command )**  
**(1 mark for fields with data types)**  
**(1/2 mark for PRIMARY KEY constraint)**

- (b) Write a PL/SQL code to modify all the CUST\_PHONE numbers by joining '2' before each phone number if it contains 7 characters. 2

Ans:

```
BEGIN
    UPDATE Customer Set Cust_Phone = '2' || Cust_Phone WHERE Length (Cust_Phone) =7;
END;
```

**(1 mark for Update command)**  
**(½ mark for SET )**  
**(½ mark for WHERE clause)**

- (c) Write a PL/SQL code to modify all the CUST\_PHONE numbers by removing '2' if it starts with '2'. 2

Ans:

```
BEGIN
    UPDATE Customer Set Cust_Phone = SUBSTR (Cust_Phone ,2 ,LEN(Cust_Phone)-1) WHERE
    Cust_Phone Like '2%';
END;
```

**(½ mark for Update command)**  
**(½ mark for SET )**  
**(½ mark for WHERE clause)**  
**(½ mark for using SUBSTR)**

- (c) Write PL/SQL code to create two Statement level triggers TrigBeforeUpdateCustomer and TrigAfterUpdateCustomer before and after UPDATE statement respectively on the table Customer which signals 'Starting Update' to signify that modification of records has started and 'End of Update' message to signify that modification is over. 4

```
Ans: CREATE OR REPLACE TRIGGER TrigBeforeUpdateCustomer
BEFORE UPDATE ON CUSTOMER
BEGIN
    DBMS_OUTPUT.PUT_LINE ('Starting Update');
END;

And

CREATE OR REPLACE TRIGGER TrigAfterUpdateCustomer
AFTER UPDATE ON CUSTOMER
BEGIN
    DBMS_OUTPUT.PUT_LINE ('End of Update');
END;
```

**(2 marks for each trigger)**