PAN AFRICA CHRISTIAN UNIVERSITY

DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT:	**COMPUTING AND INFORMATION TECHNOLOGY**
COURSE CODE:	**DICT0131**
COURSE TITLE:	**EVENT DRIVEN PROGRAMMING**
CAMPUS:	**ROYSAMBU**
EXAM DATE:	**TUESDAY,XXXX,APRIL,2026**
TIME:	**8:00AM -10:00AM**

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Three questions in Section **B.**
- Write only your **student number** on the answer booklet provided.

SECTION A
(Answer ALL questions in this section)

Question One (15 marks) Compulsory

a) State Object naming conversions of controls (prefix) for the following: **[3 Marks]**

i. Textbox

ii. Command button

iii. Form

b) "Visual Basic is an event-driven programming." Justify this statement. **[2 Marks]**

c) Juma wrote a program and declared each of the following as variable names. Explain, giving a reason, why each could be incorrect.

 © Copyright 2026 All Rights Reserved PAC University

i.123name **[1 Mark]**

ii. End Sub **[1 Mark]**

d) Explain three features of Visual Basic. **[3 Marks]**

e) Write Visual Basic code to calculate the area of a rectangle when the user enters the length and width in "txtlength" and "txtwidth" respectively. The area of the rectangle is displayed in the "txtarea". **[5 Marks]**

SECTION B
(Answer any THREE (3) questions in this section)

Question Two (15 Marks)

a) With reason, state the most appropriate VB data type for each variable that stores the following values.

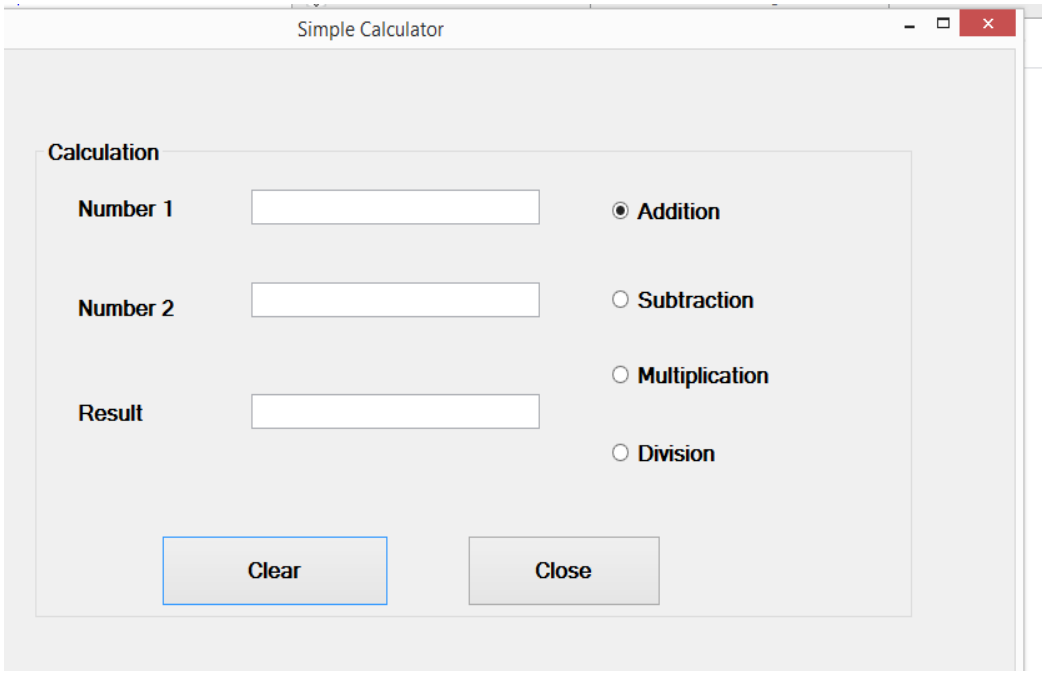
i. A student registration number **[2 Marks]**

ii. Amount of money paid as fees by a student **[2 Marks]**

iii. Whether a student is male or female **[1 Mark]**

b) Write Visual Basic code for each of the radio buttons to calculate the sum, difference, product and quotient of two numbers when the user enters Number 1 and Number 2 in "txtNumber1" and "txtNumber2" respectively. The product is displayed in the "txtResult". Also attach the code in a "Clear" and "close" buttons click event. The form is shown below: **[10 Marks]**

 © Copyright 2026 All Rights Reserved PAC University



Question Three (15 Marks)

a) Distinguish between the following as used in Visual Basic programming language. **[6 Marks]**

i. Label and text box

ii. Check box and radio button

iii. Method and Event

b) Write a Visual Basic program that will be able to display different age category in the table below. *Use if … else statement* attach a code to a command click client. **[9 Marks]**

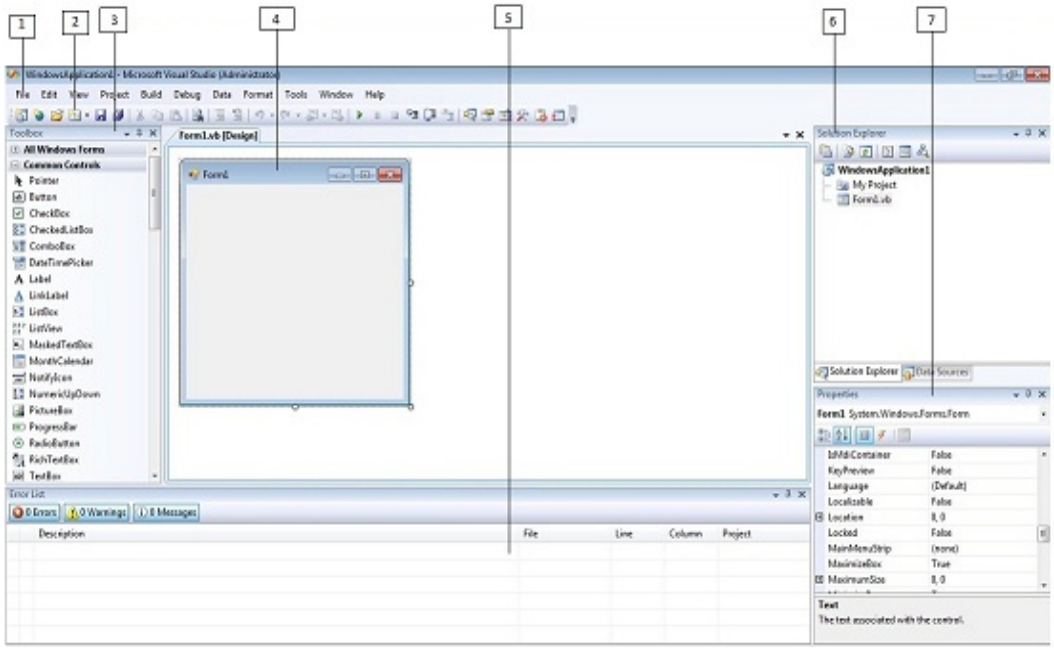
 © Copyright 2026 All Rights Reserved PAC University

Age	Category
Equal to 5	Young
Between 13 and 19	Teenager
Between 20 and 35	Special adult
Above 50	Senior citizen
Any other	Everyone else

Question Four (15 Marks)

a) Distinguish between the Str ( ) and Val ( ) functions as used in Visual Basic programming language. **[4 Marks]**

b) The Screen interface below shows the features of the Visual Basic IDE.



i) Identify the parts labelled 3, 4, 5,6 and 7. **[5 Marks]**

ii) Explain the functions of the parts named 3,6 and 7 above. **[6 Marks]**

 © Copyright 2026 All Rights Reserved PAC University

Question Five (15 Marks)

a) Identify the errors, in the following program, and suggest how you would solve them.

```
Dim strTest, 123str As String
 strTest = 34
messageBox.Show("Welcome to VB programming")
"testing" = strTest
txtTest.Text = strTest
Dim intVar As Integer
```

[5 Marks]

b) A Visual Basic program is required to calculate the average of the first twenty positive integers, and display the sum in lblSum and average in lblAverage.

i. Write the above program using a *Do.While* loop **[5 Marks]**

ii. Rewrite the above program using *Do..Until* loop **[5 Marks]**

Question Six (15 Marks)

a) Variables are used by visual basic to hold information needed by an application. State four rules used in naming variables. **[4 Marks]**

b) Write a Visual Basic code to add the following names of departments, Business, Electrical, Building, Information Technology and Mechanical in a combo box.

[5 Marks]

c) Write a VB program that allows a user to enter the strings 'Alex' and '1234' into respective textboxes in a login screen. If the two are valid, a form named frmain is opened, otherwise a message 'Invalid name or password' is displayed on a message

 © Copyright 2026 All Rights Reserved PAC University

box. Attach the code to a command button. **[6 Marks]**

END

 © Copyright 2026 All Rights Reserved PAC University