Unique Paper Code	:	**62347501_OC**
Name of the Course	:	**B.A. Programme (Computer Applications)**
Name of the Paper	:	**Visual Programming**
Semester	:	**V**
Duration	:	**3 Hours**
Maximum Marks	:	**75**
Year of Admission	:	**2017 & 2018**

Instructions for Candidates

All questions carry equal marks. Attempt any *FOUR* questions.

Q. 1) Consider the following scenario: Based on *Emp_ID, Employee_Name, Region* and *Sales*, a Manager calculates *Bonus_Payment* using the given criteria:

Sales	*Bonus_Payment*
< 400000	10000
>= 400000 and < 550000	14000
>= 550000 and < 720000	20000
>= 720000 and < 850000	28000
>= 850000 and < 990000	31000
>= 990000 and < 1050000	36000
>= 1050000	40000

Write steps to design a form for the above scenario. Write VB code to calculate *Bonus_Payment*.

Also, display "(*Employee_Name*) should be provided (*Bonus_Payment*) in lieu of (*Sales*)" in a Label where *Employee_Name, Bonus_Payment* and *Sales* are variables used to display the values.

Q. 2) Consider two Single-Dimensional arrays: *arr1* and *arr2*. Array *arr1* is of dimension 15 and of datatype Single. Array *arr2* is of dimension 15 and of datatype Double. Write a program in VB to implement the following tasks: (a) initialize *arr1* with each element containing the quotient of division of its index with 6. Also calculate and display the sum of values stored in the *arr1*. (b) initialize *arr2* with each element containing the sum of its index with 24. Also calculate and display the cubes of number stored in the array *arr2*.

What will be the output of the following VB functions: (i) Right(str,6) where *str* is "Worldwide Pandemic"; (ii) FormatDate(sal) where *sal* is "04/05/2001"?

Q. 3) Write a program to design a form in VB to save the following details of a shop: *Name, Address, GSTIN, Owner(values: Single, Partnership), Status(values: Rented, Leased and Self), Owner Address, Owner Age*.

Write VB statements that will: gray a value of the Check Box and clear the contents of all Text Boxes and Labels inserted in the above form.

Write steps to set ToolTip for all the controls in the above form.

List the default property of the Controls used in the above form.

Q. 4) Consider a List Box *frut1* containing five fruits namely: Apple, Mango, Strawberry, Banana and Orange.

Write VB statements that will implement the following tasks on the List Box *frut1*: (i) Select fourth item; (ii) Remove second element; (iii) Display third element; and (iv) Compute the number of elements present.

Give the output of List Box *frut1* after the execution of above statements.

Write the steps and VB code to insert four items in the List Box *frut1* - Pear, Kiwi, Papaya and Guava during design time.

Which looping structure in VB is suitable in the following scenarios: (a) In case, the loop has to be run till a specific condition is met, (b) A statement has to be repeated *n* times. Justify your answer.

How many times will the following loops be executed (a) "For intCounter = 40 To 200 Step 30" and (b) "For intCounter = 240 To 180 Step -5" ?

Q. 5) Consider a VB project *Demo* containing Form *frm1*, *frm2* and *frm3*. The Form *frm1* contains Command Button *cmd1*. Write the steps to delete a Form *frm2* from this project.

Also, write the steps to add an existing Form *frm4* of a project *PR1* that contains Command Button *cmd2*, stored in an existing VB project *Test*.

Write VB code that allows to conceal the Form *frm1* when clicked on *cmd1* and displays the Form *frm4*.

Write VB code to input a number from the user using *cmd2* and displays Form *frm1* when input is greater than 10 otherwise *frm2*. Also display an error message for all invalid values.

Consider the following VB code:

Private Sub Check (Place As Integer)

    Place = 5

End Sub

What will be the value of Place after the procedure Check is called? Justify your answer.

Write steps to create a Breakpoint at Place = 5 statement. How will it affect execution?

Q. 6) Consider a database *College*. This database contains a table named *Professor* with the following fields: *ID_Number, Name, Department, Salary, Gender, Status, Address, Phone_Number, Email, Specialization* and *Date_of_Joining*. Write steps to create VB Form to display database *College* using Data Control and Data Bound Control.

Also, write steps and VB code to create the following Command Buttons in the above mentioned Form to navigate through the entries in the database: Next, Previous, First and Last. The VB code should also contain comments to explain what each Command Button is doing.