

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) For each of the control names of VB given below, identify the type of controls and specify one property of each: (i) *lblTitle*, (ii) *cmdSubmit*, (iii) *txtAge* and (iv) *optBlack*.

Write VB statements to do the following at run time: (a) Change background color of Label *lbl*; (b) Select an Option Button *opt1*; (c) Hide a Text Box *txt1*; (d) Set caption for a Frame *fra1*.

Given a VB form having a Text Box *text1* and one Command Button *button1*. Accept a number from the user and write VB code to implement the following: On clicking *button1*, check whether the number is greater than zero or not.

Find the value of the variable *sum* in the following VB code:

```
sum = 0
For count = 1 to 10
    sum = sum + count
If sum >= 15 Then
    Exit For
EndIf
Next
```

Q. 2) Write VB code to search an element in a Two-Dimensional array. The VB code should display the index if the element is found, otherwise it should display “-1”. Explain with the help of an example how to convert a For/Next structure to Do/Loop structure.

Write VB code to change the text color of the form depending on the selection from the three colors given in the form.

Q. 3) Write VB code to calculate and display the area and perimeter of a rectangle using the relation $\text{Area} = l * b$ and $\text{Perimeter} = 2 * (l + b)$ where l and b are user defined inputs.

What will be the value of K after execution of the following VB statement:

$K = y ^ (x * z) + 2$ and $K = y ^ (x * z + 2) / y$ (Assume that $x = 4, y = 5$ & $z = 5$).

What will be the output of the following VB code, assuming that $a = 15, b = 24$ and $c = 50$?

```
If a >= 18 And b > 23 Then
    Print "Hello"
ElseIf a >= 15 And c > 45 Then
    Print "Hi"
Else
    Print "Bye"
End If
```

Write steps to create a breakpoint at ElseIf. How does it affect the execution of the VB program? Rewrite the above If statement using Select Case statement.

Q. 4) Consider a database *Team*. This database contains a table named *Player* with the following fields: *Player_ID, Name, Age, Mobile, Position, Address, Gender, Experience, BMI, Height, Weight* and *Salary*.

Write steps to create VB Form to display this database using Data Control and Data Bound Control.

Also write steps and VB code to create the following Command Buttons in the Form to navigate through the entries in the database: Next, Previous, First and Last. On clicking of each Command Button a message should be displayed specifying the task performed by that button.

Q. 5) Write VB code to calculate and display the sum of following series:

$$1^3+2^3+3^3+4^3+ \dots\dots\dots+n^3$$

Write VB statement to: Append “OBE” to the content of a Text Box *txt1*; Centrally align the content of a Label *lbl*.

How many times will the following loops be executed? (i) For CountInteger = 1 To 7; (ii) For CountInteger1 = 2 To 12 Step 4 and (iii) For CountInteger2 = 14 To 1 Step -2.

Consider the following VB function call: Val(5000) and Val(5,000). Is there any difference in the output?

Q. 6) Consider the following VB statement:

arr(5) = 9

Identify the subscript in the above statement. Can the value 5 in this statement be changed to “-7”? Give reasons.

Consider the following VB code:

```
For i =1 To n Step 4
    Printer.Print i; i*i,
Next
```

What will the output of the above code if $n = 16$?

Write VB code that accepts a date and a number as inputs and displays the date with Day of Week and number as percentage with one decimal place.

Write VB statements to attach the string “University of Delhi” at the end of content in the Label *lbl1* and “BA Prog” at the end of content in the Text Box *tbx1*.

Create user defined data type in VB to store details of a shop: *Shop name, Shop number, GSTIN, Address, Turnover* and *Owner*.