

# PANJAB UNIVERSITY

## APPLICATION DEVELOPMENT USING VB.Net

(BCA 6<sup>TH</sup> SEMESTER)

Maximum Marks: 65

**Note:** - Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Section.

**2021: -**

1. Attempt the following:
  - a) What is the purpose of CLR? Discuss in brief. 2
  - b) What is the purpose of Solution Explorer in Visual Studio? Discuss in brief. 2
  - c) Give the syntax of Function statement. 2
  - d) List any four logical operators available in VB.Net. 2
  - e) What is ASP.NET? What is it used for? 2
  - f) Differentiate between connected and disconnected programming environment supported by ADO.NET. 2
  - g) What is a cookie? 1

### SECTION – A

2. Discuss the utility of following controls with the help of suitable examples and code snippets: Text Box, Check Box, Button, List Box  
Also highlight the important properties and methods of these controls. Appropriately assume any required information yourself. 13
3. a) Write a note on history and features on .NET Framework. 6  
b) What is the use of SaveFileDialog control? What are its important properties and methods? Discuss the utility of this control with the help of a suitable example and code snippets. 7

## SECTION – C

4. a) Explain the syntax and flow diagram of While....End While Loop and use this Loop to find the sum of first n numbers. Appropriately assume any required information yourself. 6  
b) What is Input Box? What is its purpose? Write suitable code snippets to demonstrate the utility of InputBox function. 7
5. a) What is and array? What are the benefits of arrays? How arrays are created and accessed in VB.Net? Write a program to display the maximum and minimum element of an array. Appropriately assume any required information yourself. 8  
b) What do you unerastand by string functions? Discuss any three and their usage with the help of suitable code snippets. Appropriately assume any required information yourself. 5

## SECTION – D

6. a) What are Web Forms? Write a short note on their advantages and features. 6  
b) What are Web Services? What are their advantages and disadvantages? Discuss. 7
7. What do you understand by validation controls? Explain the purpose and utility of following controls with the help of suitable code snippets:  
a) RequireFieldValidator  
b) CompareValidator  
c) ValidationSummary 13

## SECTION – E

8. a) What is ADO.NET? Briefly discuss ADO.NET object model. 7  
b) Write a short note on the concept and utility of ADO.NET DataReader. 6
9. Write suitable code / code snippets to demonstrate how ADO.NET can be used to perform insert, update and delete operations on the following table:  
Book (Book ID, Title, Authors, Publisher, Price, Edition, YearOfPurchase).  
Appropriately assume any required information yourself. 13