



BCA/NET-404

2024

(4th Semester)

BACHELOR OF COMPUTER APPLICATIONS

Paper : NET-404

(C# and ASP.NET)

Full Marks : 70

Pass Marks : 45%

Time : 3 hours

(PART : B—DESCRIPTIVE)

(Marks : 45)

*The figures in the margin indicate full marks
for the questions*

- 1. What is C#? With reference to C#, explain the following with suitable programs : 3×3=9**
- (a) Assignment operators**
 - (b) Bitwise operators**
 - (c) Relation operators**

Or

- (a) Explain the component of .NET framework.**

6

(b) What is switch statement in C#? Write a simple program to demonstrate the switch statement.

3

2. Explain about the constructor overloading and demonstration constructor overloading program in C# using the following :

9

(Faculty, Faculty_Name, Subject_one, Subject_two, Subject_three)

Or

Define sealed keyword. Write its syntax and its features. Write a simple C# program using sealed keyword and write a sample output with sealed keyword and without sealed keyword.

3. (a) Write any program in C# to show the concept nesting of class.

6

(b) Explain the phases in garbage collection.

3

Or

What is enumeration? Write its syntax. Write a program using enumeration to display the name of days of week.

9

4. (a) Write a C# program to demonstrate IndexOutOfRangeException.

6

(b) Explain thread synchronization and its advantages.

3

Or

- (a) Write a C# program to find the area of rectangle using multicast delegate. 6
- (b) How are multicast, event and delegate connected? 3

5. Write short notes on the following : 9

- (a) Validation control
- (b) Session state
- (c) Data Bind controls

Or

- (a) How does IIS work in ASP.NET? 4
- (b) Differentiate between server-side scripting and client-side scripting. 5

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(4th Semester)

BACHELOR OF COMPUTER APPLICATIONS

Paper : NET-404

(C# and ASP.NET)

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

1. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×10=10

(a) Which validation control in ASP.NET can be used to determine if the data is entered into a Text Box control is of type currency?

- (i) Validation summary ()
- (ii) Compare validation ()
- (iii) Required field validation ()
- (iv) None of the above ()

(b) Which of the following is not an ASP.NET page event?

(i) Init ()

(ii) Load ()

(iii) Import ()

(iv) None of the above ()

(c) You have to log the data into database if your session is timeout. Which event will you use?

(i) Session_End ()

(ii) Application_End ()

(iii) Application_Start ()

(iv) Application_Session Timeout ()

(d) How to implement authentication via web.config?

(i) Include the authentication element ()

(ii) Include the authorization element ()

(iii) Include the identity element ()

(iv) Include the deny element ()

(e) What ASP.NET object encapsulates the state of the client and the browser?

- (i) Application object ()
- (ii) Session object ()
- (iii) Response object ()
- (iv) Request object ()

(f) What is the difference between Response.Write() and Response.Output.Write()?

- (i) Response.Output.Write() allows you to buffer output ()
- (ii) Response.Output.Write() allows you to write formatted output ()
- (iii) Response.Output.Write() allows you to flush output ()
- (iv) Response.Output.Write() allows you to stream output ()

(g) Which of the following technologies is also used with ASP.NET?

- (i) CSS ()
- (ii) JavaScript ()
- (iii) AJAX ()
- (iv) All of the above ()

(h) Which is the first event triggered when a user requests an ASP.NET page?

(i) Load ()

(ii) Init ()

(iii) PreInit ()

(iv) Preload ()

(i) Which development model(s) is/are supported by ASP.NET?

(i) ASP.NET Web forms ()

(ii) ASP.NET Webpages ()

(iii) ASP.NET API ()

(iv) All of the above ()

(j) In _____, a virtual method is called which is decided at run-time.

(i) late binding ()

(ii) early binding ()

(iii) lazy binding ()

(iv) global binding ()

2. Indicate whether the following statements are *True (T)* or *False (F)* by putting a Tick (✓) mark : 1×5=5

(a) DataReader object is a forward-only object.

(T / F)

(b) System.Web.UI.Page is default namespace used for ASP.NET Web form.

(T / F)

(c) The term used for pages that depend on the Master pages are Content pages.

(T / F)

(d) Every server control of ASP.NET must not have an id.

(T / F)

(e) Session object is created on the server while application objects are created on the client side.

(T / F)

3. Answer the following questions in short : 2×5=10

(a) What are web controls in ASP.NET?

(b) What is the role of OUT parameter in array?

(c) How is interface different from inheritance?

(d) What is the difference between .EXE and .DLL files?

(e) What is web.config?
