

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025
(Fourth Semester)

Branch – COMPUTER TECHNOLOGY

APPLICATION FRAMEWORK

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	What is C#? a) A type of database b) A programming language c) A type of software d) A web framework	K1	CO1
	2	In C#, which of the following is a valid variable declaration? a) int num; b) int 1num; c) float num = 3.14f; d) Both a and c are valid	K2	CO1
2	3	Which of the following is a correct way to define a method inside a class in C#? a) public void Method() { } b) public Method() { } c) method public void() { } d) def public void Method() { }	K1	CO2
	4	In C#, which keyword is used to define a field in a class? a) field b) var c) int d) private or public	K2	CO2
3	5	What is an MDI (Multiple Document Interface) application in Windows Forms? a) An application that allows only one document at a time b) An application where multiple child windows can be opened under a single parent window c) An application that works without a user interface d) An application that uses only text-based windows	K1	CO3
	6	What is the primary purpose of the OpenFileDialog control in Windows Forms? a) To allow the user to select a font b) To enable the user to open or save files c) To print documents d) To change the color of the window	K2	CO3
4	7	What is ASP.NET? a) A language used for mobile development b) A web development framework for building dynamic web applications c) A database management system d) A text editor for web development	K1	CO4
	8	What is the function of input validation in ASP.NET? a) To check the syntax of a web page b) To ensure the data entered by the user is correct and secure c) To display the web page on the browser d) To execute SQL queries	K2	CO4
5	9	Which class in ADO.NET is used to read data from a database in a forward-only, read-only manner? a) SqlDataAdapter b) SqlDataReader c) SqlCommand d) DataSet	K1	CO5
	10	How can ADO.NET work with XML data? a) It cannot work with XML data b) By using XmlDataAdapter to interact with XML data c) By storing data in XML format directly in the database d) By using XmlReader to read SQL queries in XML format	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Illustrate the evolution of C#.	K2	CO1
	(OR)			
	11.b.	Examine the C# environment in detail.		
2	12.a.	Construct how to defining a class in C#. Give a suitable example.	K3	CO2
	(OR)			
	12.b.	Distinguish between radio button control with check box control properties.		
3	13.a.	Build a basic MDI (Multiple Document Interface) application in C# that allows opening multiple child windows.	K3	CO3
	(OR)			
	13.b.	Identify the process of using ColorDialog in a Windows Forms application and apply it to change the background color of a form.		
4	14.a.	Analyze the difference between authentication and authorization in an ASP.NET application.	K4	CO4
	(OR)			
	14.b.	Distinguish between the use of FileUpload control and the input types in HTML forms for file handling in ASP.NET.		
5	15.a.	Analyze the differences between using a DataReader and a DataSet for reading data in ADO.NET.	K4	CO5
	(OR)			
	15.b.	Examine how ADO.NET handles XML data. How can you use ADO.NET to retrieve and manipulate XML data?		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Categorize the various types of operators supported by C#. Give an example.	K4	CO1
2	17	Examine how to hide the base class method in C#? Give an example.	K4	CO2
3	18	Analyze the use of menus and toolbars in Windows Forms. How do they improve user experience in a desktop application? Give a suitable example.	K4	CO3
4	19	Examine how input validation is implemented in ASP.NET. List the common input validation controls and their use cases.	K4	CO4
5	20	Compare and contrast the use of DataAdapter and Command objects in ADO.NET. How do they interact with the database?	K4	CO5

Z-Z-Z

END