



KONGU ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)

ERODE – 638 107

PGDCA



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2021-2022



KONGU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

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DEPARTMENT OF COMPUTER SCIENCE

POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS

SCHEME OF EXAMINATION – CBCS PATTERN



(For the candidates admitted during the academic year 2021 – 2022 and onwards)

Course Code	Course Title	Inst. Hrs./Week	T/P	Examination Details				Credits
				Duration in Hours	CIA	ESE	Total Marks	
SEMESTER I								
21PBCT101	Core I: Operating Systems	4	T	3	25	75	100	4
21PBCT102	Core II : Data Base Management Systems	4	T	3	25	75	100	4
21PBCT103	Core III : Scripting Languages	4	T	3	25	75	100	4
21PBCT104	Elective – I	4	T	3	25	75	100	4
21PBCT106	Core Practical I :Python Programming Lab	4	P	3	40	60	100	4
21PBCT107	Core Practical II: Scripting Languages Lab	4	P	3	40	60	100	4
21PBCT108	Soft Skills Lab – Multimedia Lab	2	P	3	20	30	50	3
Total		30					650	27
SEMESTER II								
21PBCT201	Core IV: .Net Programming	5	T	3	25	75	100	4
21PBCT202	Elective – II	5	T	3	25	75	100	4
21PBCT204	Core Practical III: C# Lab	4	P	3	40	60	100	4
21PBCT205	Project Work and Viva-Voce	4	P	-	40	160	200	6
Total		-					500	18
TOTAL							1150	45

CIA – Continuous Internal Assessment

ESE – End Semester Examinations

LIST OF ELECTIVES

Electives for I & II Semester

S. No.	Course Name	Course Code
1.	Python Programming	21PBCT104
2.	Cloud Computing	21PBCT105
3.	Software Testing	21PBCT202
4.	Cognition and Problem Solving	21PBCT203



B. J. Ram
Chairman

Board of Studies

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Sem.	Course Code	Core Practical III: MULTIMEDIA LAB	Total Marks:50		Hours Per Week	Credits
I	21PBJCP108		CIA : 25	ESE :25	2	3

Course Objectives: On successful completion of the course the students should have:

1.Knowledge in multimedia tools

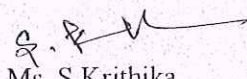
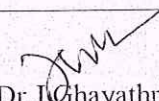
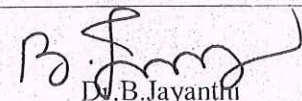
Course Outcomes (CO): On completion of the course, students should be able to

CO 1	Design logos and pictures	K1 - K6
CO 2	Create web pages using 3D Effects	
CO 3	Implement images, audio and video techniques	
CO 4	Apply transition effects to the shapes	
CO 5	Develop a games using animation	

K1 :Remember; K2: Understand; K3 :Apply; K4: Analyze; K5 : Evaluate; K6 :Create

LIST OF PROGRAMS

1. Design a Company logo
2. Design a 3D button for a Web Page
3. Design a movie on given topic by using audio, video and photos with effects.
4. Create a square and gradually convert it into a circle
5. Create a bouncing ball using animation


Course Designed By	Verified By	Approved By HOD
 Ms. S.Krithika	 Dr. J. Jayathri	 Dr. B. Jayanthi

Mapping of COs with POs and PSOs:

PO/ PSO	PO							PSO				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	L	L	M	M	M	L	M	M	S
CO2	S	M	S	L	M	L	L	L	L	M	S	M
CO3	S	S	M	M	M	L	L	M	M	L	L	S
CO4	S	M	M	M	L	L	L	M	M	L	L	M
CO5	M	S	S	M	L	L	M	M	L	L	M	S

S-Strong, M-Medium, L-Low




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Sem.	Course Code	Core Paper – IV .NET PROGRAMMING	Total Marks:100		Hours Per Week	Credits
II	21PBCT201		CIA : 50	ESE :50	5	4

Course Objectives: On successful completion of the course the students should have:

1. Understood .NET technologies concepts
2. Understood the programming concepts of C#
3. Understood development of web applications using ASP.NET through C#

Course Outcomes (CO): On completion of the course, students should be able to

CO 1	Explain the architecture of .NET framework and object oriented programming concepts	K1 - K6
CO 2	Understood the basic programming concepts of C#	
CO 3	Know the data accessing with database	
CO 4	Develop the web applications using ASP.NET through C#	
CO 5	Create ASP.NET applications using standard .NET controls	

K1 :Remember; K2: Understand; K3 :Apply; K4: Analyze; K5 : Evaluate; K6 :Create

Unit –I :

Evolution of .NET - Benefits of .NET Framework - Architecture of the .NET Framework - Performing Basic IDE Operations.
Creating a simple C# Console Application - Identifiers and keywords- Data Types, Variables, and Constants - Expressions and Operators

Unit –II :

Namespaces - The System Namespace - Classes and Objects Constructors and destructors – Delegates - Events -Control Flow Statements - Exception Handling - Checked and Unchecked Statements

Unit –III :

Data Access with ADO.NET-ASP.NET Essentials: Describing the ASP.NET Life Cycle - Creating a Sample Web Application - Creating a Sample Web Site.

Unit –IV :

Developing a Web Application: Specifying a Location for a Web Application - File Types - Exploring ASP.NET Web Pages - Code Render Blocks - Coding Models - Page Directives - Working with Server Controls. **Application Structure and State:** Structure of an Application - The Global.asax application File - Using States - HTTP Handlers - Generic Handlers - Post back and Cross-Page Posting.

Unit –V :

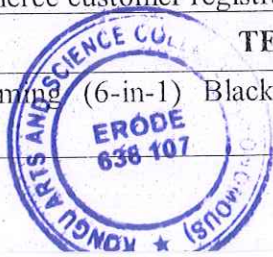
Web Forms: Standard Controls - Navigation Controls: Tree View, Menu, and Sitemap Path - Validation Controls: Unobtrusive Validation in ASP.NET Web Forms - The BaseValidator Class - The Required Field Validator Control - The RangeValidator Control - **Working with Database controls.**

Skill Development Activities:

1. Create a website for a manufacturing company that is in the starting stage.
2. Design a webpage to display the number of users currently accessing the web server.
3. Develop an ecommerce customer registration web application form with necessary validations.

TEXT BOOKS

1	.NET 4.5 Programming (6-in-1) Black Book, Dreamtech Press, Kogent Learning Solutions Incorporation, 2013.
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REFERENCE BOOKS

1	Adrian Turischi, DotThatCom.com. Jason Werry, Greg Hack, Joseph Albahari, Saurabh Nandu and Wei Meng Le, C#.net Web Developer's Guide, Syngress, 2002.
2	C. Muthu, Visual C#.Net, Vinay Nicole Imprints Pvt. Ltd., Chennai, 2008.
3	Herbert Schildt, C# 2.0: The Complete Reference, Tata McGraw Hill Edition, Second Edition, 2006.

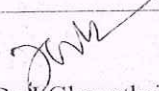
Web Resources

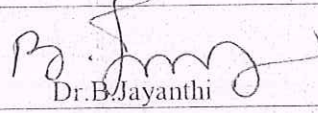
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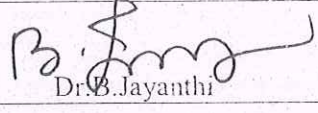
Course Designed By

Verified By

Approved By HOD


 Dr. J. Ghayathri


 Dr. B. Jayanthi


 Dr. B. Jayanthi

QUESTION PAPER PATTERN

SECTION-A(10 X 1 = 10 Marks)

Answer ALL the questions
 Choose the correct answer
Four options should be given
 ('None of these' should be avoided)

SECTION-B(5 X 3 = 15 Marks)

Answer ALL the questions
 Either or type
 Two questions from each unit

SECTION-C(5 X 5 = 25 Marks)


Answer ALL questions
 Question Number: 16 to 19
 (Either or type)
 Question Number 20 is
 Compulsory - Case Study

Mapping of COs with POs and PSOs:

PO/ PSO	PO							PSO				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	L	L	M	M	M	L	M	M	S
CO2	S	M	S	L	M	L	L	L	L	M	S	M
CO3	S	S	M	M	M	L	L	M	M	L	M	S
CO4	S	M	M	M	L	L	L	M	M	L	L	M
CO5	M	S	S	M	L	L	M	M	L	L	S	M

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Sem.	Course Code	Core Practical - IV C# LAB	Total Marks:100	Hours Per Week	Credits
II	21PBJCP204		CIA : 50 ESE :50	4	4

Course Objectives: On successful completion of the course the students should have:

1. Practical knowledge in C#.NET Programming

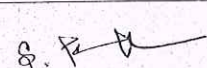
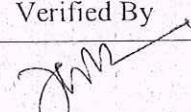
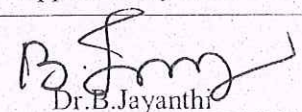
Course Outcomes (CO): On completion of the course, students should be able to

CO 1	Use C# basics	K1 - K6
CO 2	Design, document, code and test small C# console and GUI applications	
CO 3	Create simple application using standard web controls	
CO 4	Structure and model the programming language C #	
CO 5	Implement and create Applications with C#.	

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LIST OF PROGRAMS

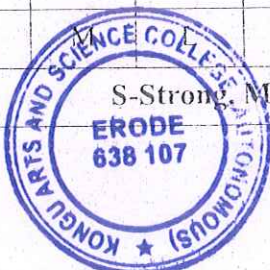
1. Write a Program in C# to find the second largest element in a single dimensional array.
2. Write a Program in C# to Check whether a number is Palindrome or not.
3. Write a Program in C# to implement Stack operations.
4. Write a program to reverse a given string using C#.
5. Write a Program in C# to Swap two numbers without using third variable.
6. Implement linked lists in C# using the existing collections name space.
7. Write a C# Program to Calculate the Distance Travelled by Reading Speed and Time.
8. Write a C# Program to Calculate Area and Volume of a Cone.
9. Write a C# Program to Negate the Positive Elements of an Array.
10. Write a C# Program to find a side using Pythagoras Theorem.

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	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	L	L	M	M	M	L	M	M	L
CO2	S	M	S	L	M	L	L	L	L	M	M	L
CO3	S	S	M	M	M	L	L	M	M	L	L	M
CO4	S	M	M	M	L	L	L	M	M	L	M	L
CO5	M	S	S			L	M	M	L	L	M	L

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