COURSE PLAN

NAME OF THE DEPARTMENT: BCA/IT

NAME OF THE FACULTY: **Prof. Goutam Sanyal and Prof. Jayanti Kumari**

ACADEMIC SESSION: **2023-24**

YEAR: **2024**

PROGRAMME: **BCA**

SEMESTER: **V**

COURSE TYPE: Core

COURSE NAME: **INTERNET TECHNOLOGY**

COURSE CODE: **C11**

TOTAL CREDIT: **6**

PROGRAMME OUTCOMES (PO):

PO1: Scientific & Computational Knowledge: - Apply the information on scientific & computational ideas, software engineering and innovation basics.

PO2: Problem Analysis, Design & Implementation: - Identify, formulate and analyze real world problem. Design solution for Software, Hardware & Networking problems and implementation using Software & Network tools.

PO3: Modern tool usage: - Ability to select modern computing tools, skills and techniques necessary for innovative software solutions.

PO4: Project Management: -Comprehend Software Engineering and Technology standards and apply these to prepare own project and system as a part and pioneer in a group.

PO5: Career Development & Entrepreneurship: Classify opportunities, private enterprise dream and use of original thoughts to build worth and means for the betterment of the human being and the world.

PO6: Communication: Communicate effectively on computational & information Technology activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO7: Ethics: Ability to apply and commit professional Ethics, cyber regulations & control on software piracy in a global economic environment.

PO8: Preparing students for future aspects: Building and improving their creativity, social awareness, and general knowledge.

PO9: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological changes.

PROGRAMME SPECIFIC OUTCOMES (PSO):

PSO1: An ability to apply technical comprehension in varied areas of Computer Applications and experience a conducive environment in cultivating skills for thriving career and higher studies.

PSO2: Understand the concept of Programing logic, Web designing logic, Signal processing, Image processing, Mobile Applications, Multimedia Media.

PSO3: Develop competencies in various disciplines of technologies such as Server-side Web applications, computer networking, software engineering, database concepts and programming

A.   COURSE OUTCOMES (COs):

CO1: Understand Objects, Array and Array List class

CO2: Learn Data types, operators, functions, control structures, events and event handling.

CO3: Understand and applying JDBC Fundamentals

CO4: Understand the introduction to Java Server Pages, HTTP and Servlet Basics, The Problem With Servlets, The Anatomy of a JSP Page, JSP Processing.

CO5: Design JSP Application with MVC, Setting Up the JSP Environment, Implicit JSP Objects, Conditional Processing, Displaying Values, using an expression to Set an Attribute, Declaring Variables and Methods, Error Handling and Debugging, Sharing DataBetween JSP Pages, Requests, and Users, Database Access.

CO6: Java Beans Fundamentals, JAR files, Introspection, developing a simple Bean, Connecting toDB

COURSE TEACHING AND LEARNING ACTIVITIES
A. PEDAGOGY
i.	**Whiteboard**	√
ii.	**Flipped Class**	√
iii.	**PPT**	√

B. COURSE COMPLETION PLAN

UNIT	NO. OF LECTURES		TEST	QUIZ	ASSIGNMENT
	THEORY	**PRACTICAL/TUTORIAL**			
1	6	2	√		√
2	12	8	√		√
3	8	7	√		√

4	15	15	√		√	
5	6	9	√		√	

B. COURSE DELIVERY PLAN:

UNIT	TOPIC/SUBTOPIC	LECTURE REQUIRED (Theory & Practical)	CO ADDRESSED	ASSIGNMENT/TEST/QUIZ
1	Use of Objects, Array and Array List class	8	CO1	√
2	Data types, operators, functions, control structures, events and event handling.	20	CO2	√
3	JDBC Fundamentals, Establishing Connectivity and working with connection interface, Working with statements, Creating and Executing SQL Statements, Working with Result Set Objects.	15	CO3	√
4	Introduction to Java Server Pages, HTTP and Servlet Basics, The Problem with Servlets, The Anatomy of a JSP Page, JSP Processing, JSP Application Design with MVC, Setting Up the JSP Environment, Implicit	30	CO4, CO5	√

	JSP Objects, Conditional Processing, Displaying Values, Using an expression to Set an Attribute, Declaring Variables and Methods, Error Handling and Debugging, Sharing Data Between JSP Pages, Requests, and Users, Database Access.				
5	Java Beans Fundamentals, JAR files, Introspection, Developing a simple Bean, Connecting toDB	**15**	**CO6**		√

C. COURSE OUTCOME ASSESSMENT PLAN
a. DIRECT ASSESSMENT

(Please tick the appropriate column)

COURSE OUTCOME	ASSESSMENT				REMARKS
	QUIZ	TEST	MID SEMESTER	END SEMESTER	
CO1		√	√		
CO2		√	√		
CO3		√	√		
CO4		√	√		
CO5		√	√		
CO6		√	√		

b. INDIRECT ASSESSMENT (STUDENT SURVEY)

Rate the following aspects of course outcomes. Use the scale 1-3

S. No	Course Outcome	1	2	3
1.	CO1	√		
2.	CO2	√		
3.	CO3	√		
4.	CO4		√	
5.	CO5			√
6.	CO6			√

1. Average
2. Good
3. Very Good

D. SUGGESTED READINGS
a. TEXT BOOKS

Data Structures using C'', by Y.Kanetkar.

b. REFERENCE BOOKS

Data structure by R.B Patel
Data structures using C by A.M Padma Reddy

c. WEB RESOURCES Research Gate,Techbook.com