Branch: BCA	Semester-II
Subject Code: 2103	Lecture: 04 Credit: 04
Subject Title	ADVANCED C

Modules	Sr. No.	Topic and Details	No of Lectures Assigned	Marks Weight age
UNIT-I	1	<b>Arrays:</b> What are Arrays, Array initialization, Passing arrays to a function, Two Dimensional Array, Passing array as arguments to the functions.	8	16
	2	<b>Pointers:</b> An Introduction to Pointer, Pointer Declaration and Initialization of Pointer variables, Call by value and Call by Reference, Pointers with Arrays, Pointers and Character Strings	10	20
	3	Dynamic Memory Allocation: Introduction, Allocating Block of Memory, Introduction to the following functions Calloc(), Malloc(), Free(), Realloc	6	12
	4	Structure and Union: Introduction to Structure, Defining and Declaring Structure Variables, .Dot Operator, Nested Structure, Array of Structure, Introduction to Union Difference between Structure and Union	6	12
	5	FileHandling:Whyweneed a file, File operations(create,open,read, move, write, close), File opening Mode, Closing a file, Input/output operations, Creating and reading a file	6	12
	6	<b>Graphics :</b> Introductions to Graphics, Applications of C.G I/O device for, Graphics (mouse, printer, joystick, CRT), Raster and Vector Scan Display.	8	16
	7	<b>Creating</b> Circle, Rectangle, and different geometric shapes with existing predefined functions, filling algorithms, drawing and simple graphics creations with line.	6	12
		Total	50	100

## **Text Books:**

- 1. Y.P Kanetkar, "Let Us "C", Infinity Science Press, 2008
- 2. B.S Gottifries, "Schaum,s Outline of Theory and Problems of Programming with C", Tata McGraw Hill,1995.
- 3. Kerningham and Ritchie, "the C Programming Language", Prentice Hall, 1991.
- 4. Ramkumar and agrawal, "Programming in ANSI C", Tata McGraw Hill, 1996.
- 5. Jignesh Shah, "Programming in /c", Charotar Publisher, 2010
- 6. Venu Gopal," Programming in C", Tata Mcgraw-Hill Publishing company Limited,1997
- 7. E- BalaguruSwamy, "Ansi 'C", Tata McGraw Hill.
- 8. A.P Godse, "Introduction to Computer Graphics", Technical Publications, 2009