Kadi Sarva Vishwavidhyalaya, Gandhinagar BCA Semester II

BCA206 – Part 2: Core 4 (Practical) Programming with 'C'

Teaching and Evaluation Scheme:

Sub.	Sub. Type	Subject Title	Teaching Scheme		Exam Scheme				
Code			Cr.	Hrs. /	The			tical External	Total Marks
				WCCK	michiai	Externar	memai	Externar	Marks
BCA 206	Core	Programming with 'C'	2	4	-	-	15	35	50

Unit -1: Understand the concept of user defined function:

- Write a program to check the no. is Palindrome or not using UDF.
- Write a program to find sum of digits of given no using UDF.
- Write a program to find first 5 prime no using UDF.
- Write a program to swap value of two integer number using UDF
- Write a program that will print the longest word written in a line using UDF.
- Write a C program to convert all Lowercase character into their uppercase character using UDF.
- Write a program that uses a UDF to sort an array of integer.
- Write a program to search a number within an array using UDF.
- Write a program to find factorial of given no using recursion.
- Write a program to display first 25 terms of Fibonacci series using recursion.
- Write a program which explains the use of nesting of functions.

Unit -2: Understand the concept of Structure and Union:

- Define a structure of person that would contain person name, date of joining and salary using this structure to read this information of 5 people and print the same on screen.
- Define a structure of student that would contain student name, branch and total marks obtained.
- Define a structure of cricket that will describe the following information: Player name, Team name, runs, declare an array player with 10 elements and write a program to read the information about all 10 players and print.
- In a program declare following structure member: name, code, age, weight and height. Read all members of the structure for 10 persons and find list of persons with all related data whose weight > 50 and height > 40 and print the same with suitable format and title.

Unit -3: Understand the concept of Pointer:

- Write a program to print the value and address of the element using pointer.
- Write a program to accept 10 numbers and display its sum using pointer.
- Write a program to accept 10 numbers and sort them with use of pointer.
- Write a program to swap the two values using pointers and UDF.
- Write a program using pointer to determine the length of a character string.
- Write a program using pointers to read an array of integers and print its elements in reverse order.
- Write a program using UDF and pointers to add two matrices and to return the resultant matrix to the calling function.

Unit -4: Understand the concept of File Management:

- Create one text file store some information into it and print the same information on Terminal.
- A file named data contains series of integer no. Write a c program to read that no. and then Write all odd no into file named odd no and write all even no into file named even no
- Display all the contents of these file on screen.
- Write a c program to read data from keyboard write it to a file called input and Display data of input file on the screen.
- Write a program that counts the number of characters and number of lines in a file.
- Two files DATA1 and DATA2 contain sorted lists of integers. Write a program to produce a third file DATA which holds a single sorted, merged list of these two lists. Use command line arguments to specify the file names.
- Write a program to work as a dos copy command using command line argument.
- Write a C program to work as a dos type command using command line argument.
- Write a C program to work as a dos copy command using command line argument.

Evaluation Scheme:

Practical	Viva	Journal	Total
21	7	7	35

