DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Principles of Programming using C – BPOPS103/203

MODULE- 1 QUESTION BANK

C123.1 - Elucidate the basic architecture and functionalities of a computer and also recognize the hardware parts.

C123.2 - Apply programming constructs of C language to solve the real world problem

Sl.No	Questions	RBT	CO
1	What is Computer? Give its characteristics.	1	1
2	What is stored program concept?	1	1
3	Explain all the computer generations.	2	1
4	Give the applications of computer.	1	1
5	List all the computer types and explain each.	1	1
6	Give the functional block diagram / basic organization of a computer. Explain in detail.	1	1
7	State the components inside computer.	1	1
8	Explain Motherboard.	2	1
9	Explain all Input devices.	2	1
10	Explain all output devices.	2	1
11	Explain Programming paradigms.	2	1
12	Give an example of structured program.	2	1
13	What are the phases of SDLC?	1	1
14	Explain testing and debugging.	2	1
15	Define an algorithm, flow-chart and pseudocode. Give an example for each.	2	1
16	What is a program? Explain the structure of C program.	1	2
17	Show the execution of a C program with an example.	2	2
18	What is token in C? Explain the different types of tokens available in C language.	1	2
19	Define constant. Explain the different types of constants available in C language.	1	2
20	What are keywords and identifiers in C? Give example for each and explain.	1	2
21	What is a data type? Mention the different data types supported by C language, giving an example to each.	1	2

22	Explain how variables are used in a program? Also, Explain its declaration and initialization statement with example.	2	2

23	Which is valid and invalid names? If name is invalid, explain why?
	    i) 1999_space ii) _apple iii) iNtEL iv) one_2v) for vi) #12 vii) i.b.m
	    viii) help+me ix)auto
		2	2

24	Write a C program that computes the size of int, float, double and char variables.	2	2
25	Explain in detail the Formatted and Unformatted Input and output Functions in C?	2	2
26	Explain in detail how to read and write a character in C using putchar and getchar functions?	2	2
MODULE- 2 QUESTION BANK			
1	Write an Algorithm, Flow-chart, Pseudocode and Program for the following. **(RBT-Level 2)** • Sum of 2 numbers • Area and perimeter of a circle • Area and perimeter [2*(l+b)] of a rectangle • Area of square, triangle given its sides • Calculation of simple interest : ptr/100 • Swap 2 numbers • Swap 2 numbers without using temporary variable • Convert temperature in degree Celsius to Fahrenheit • Area of right angled triangle • Size of int, float, double and char variables	2	2
2	Explain the following conditional statements with syntax and example program for each. i) if ii) if-else iii) else-if ladder iv) nested if -else	2	2
3	Explain in detail conditional operator with an example program.	2	2
4	Explain switch statement with syntax and an example program.	2	2
5	Explain the Syntax of nested if …else statement. Write a C program to find largest of three numbers using nested if … else statement.	2	2
6	Write a simple calculator program in C language to do simple operations like addition, subtraction, multiplication and division. Use switch statement in your program.	3	2
7	Write a C program to compute the roots of a quadratic equation by accepting the coefficients.	3	2
8	Simulation of a Simple Calculator.	3	2
9	Compute the roots of a quadratic equation by accepting the coefficients. Print appropriate messages.	3	2
10	An electricity board charges the following rates for the use of electricity: for the first 200 units 80 paise per unit: for the next 100 units 90 paise per unit:	3	2

	beyond 300 units Rs 1 per unit. All users are charged a minimum of Rs. 100 as meter charge. If the total amount is more than Rs 400, then an additional surcharge of 15% of total amount is charged. Write a program to read the name of the user, number of units consumed and print out the charges.		

11	Write a C program for the following
	    o To check whether the given year is leap year or not
	    o To read a character and check whether it is vowel or consonant
	    o Largest of 3 numbers using ternary operator
		3	2