Semester: I / II	1ST YEAR	AY: 2026-27
Course Code: 1BEIT105	Course Name: Programming in C	

Question Bank

Q.	Module-01	M	L	C
1.	With a neat diagram, explain the steps in the execution (creating and running) of a C program.	8	L2	CO1
2.	Explain the different types of basic data types available in C.	6	L2	CO1
3.	Differentiate between compilers and interpreters.	6	L2	CO1
4.	Explain the structure of a C program with a suitable example.	8	L2	CO1
5.	Describe the various scopes in a C program.	6	L2	CO1
6.	What is a variable? What are the rules to construct a variable? Classify the following as valid/invalid identifiers: i) num2 ii) $num1 iii) +add iv) a_2 v) 199_space vi) _apple vii) #12	8	L2	CO1
7.	List the various operators in C and explain any five operators with an example.	6	L2	CO1
8.	Write a C program to find the largest of three numbers using the ternary operator.	5	L3	CO1
9.	Define algorithm and flowchart. Develop an algorithm, flowchart and C program to find the area of a circle.	5	L3	CO1
10.	What is typecasting? Explain its types with suitable examples.	6	L2	CO1
	Module-02			
11.	Explain formatted input and output statements with examples.	6	L2	CO2
12.	List the unformatted input and output functions. With syntax and an example, explain getchar() and putchar().	6	L2	CO2
13.	List and explain the conditional branching statements in C with syntax and examples.	8	L2	CO2
14.	Explain the switch statement with an example (simple calculator program).	8	L3	CO2
15.	Explain the different types of loops (iteration statements) in C with syntax.	8	L2	CO2
16.	List the differences between while loop and do-while loop with an example.	6	L2	CO2
17.	Write a C program to find the sum of natural numbers from 1 to N using a for loop.	5	L3	CO2
18.	Explain break and continue statements with an example.	6	L2	CO2
19.	Write a short note on goto and exit().	6	L2	CO2

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20.	Explain reading and writing of strings with suitable syntax and examples.	6	L2	CO2
	Module-03			
21.	Define an array. How are single-dimensional arrays declared and initialized? Illustrate with suitable examples.	6	L2	CO3
22.	Define a variable-length array. Illustrate how a variable-length array is different from a static array.	6	L2	CO3
23.	Develop a C program that reads N integers, stores them in an array and calculates the sum of all array elements.	5	L3	CO3
24.	Define a pointer. How do you declare and initialize pointers in C? Explain accessing array elements using a pointer.	8	L2	CO3
25.	Explain pointer arithmetic in C with suitable examples.	6	L2	CO3

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