



B. Tech I Semester Supplementary Examinations, January 2026

C PROGRAMMING FOR PROBLEM SOLVING

(Common to ME, ECE CSE, CSE(AIML), CSE(DS) & IT)

Maximum Marks: 70

Date: 19.01.2026

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks		(10X2M=20 Marks)	Marks	CO	BTL
1	What is conditional operator or ternary operator?		2M	1	L1
2	What are the iterative statements used in C?		2M	1	L1
3	List out Different storage class.		2M	2	L1
4	List the name of operations on stack.		2M	2	L1
5	Define string input/out functions?		2M	3	L1
6	What is array of strings?		2M	3	L1
7	What is union?		2M	4	L1
8	Write about Nested structures.		2M	4	L1
9	What is Files in C and its Uses?		2M	5	L1
10	What are the possible operations you can perform on Files?		2M	5	L1

Part-B

Answer All the following questions.		(5X10M=50Marks)	Marks	CO	BTL
11	Briefly discuss switch statement used in C language with example.		10M	1	L2
OR					
12	Define an Algorithm? Explain the characteristics of an algorithm. Write an algorithm to find Fibonacci series of a given number.		10M	1	L2
13	State the properties of static and external storage classes along with an example.		10M	2	L2
OR					
14	Write a C-program to perform binary search on array of integers.		10M	2	L2
15	Explain string handling functions with an example.		10M	3	L2

	OR			
16	Describe about pointers for inter function communication with example.	10M	3	L2
17	Write a C program to handle students profile data using structures.	10M	4	L2
	OR			
18	Explain about bit fields with suitable example.	10M	4	L2
19	Write a C program to read name and marks of n number of students and store them in a file.	10M	5	L2
	OR			
20	Define file? What are the different types of files? What are the different modes of opening a file?	10M	5	L2