

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY-BSC CS

Term End Examination (2025 Pattern) April- May – 2026- Semester – II

Course Name: Advanced C Programming
Course Code: 25BSC201T

Max. Marks: 25
Time: 1 Hr. 30 Minutes

Instructions

- All Questions are Compulsory.

Q1.	Attempt any 5 out of 7. (1 Mark each) - (5 Marks) a) What is a dangling pointer? b) What is Importance of Null character in String? c) Why Union members share memory locations. Justify? d) What is Stream? e) What is Macro in C? f) What is dereferencing? g) Give syntax for creating array of object of structure.	CO1
Q2.	Attempt any 2 out of 4. (5 marks each) (10 Marks) a) Explain the following dynamic memory allocation functions with example: (i) malloc() (ii) calloc() (iii) realloc() (iv) free() b) Write note on command line argument. c) Differentiate between printf() & fprintf(), scanf() & fscanf(). d) Explain the role of the preprocessor in C programming. How does it contribute to the compilation process?	CO2
Q.3	Attempt all questions. a) Write a program for creating a structure named Cricket that accepts cricketer name, team name, average and highest score. (5 Marks) b) Predict the output and justify your answer for the following statements in C Programming (5 Marks) i) #include <stdio.h> int main() { int arr[] = {10, 20, 30}; int *p = arr;	CO3

	<pre> printf("%d\n", p[1]); return 0; } ii) #include <stdio.h> int main() { int arr[] = {1, 2, 3, 4, 5}; int *p = arr; p++; printf("%d\n", *p); return 0; } </pre>	
Q.3	OR Attempt all questions - a) Discuss the use of typedef to create an alias for a structure. Explain the concept with example. (5 Marks) b) Write a C program to count the number of occurrences of the given character in a file. (5 Marks)	CO3
