

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2025
(First Semester)**

**Branch - COMPUTER TECHNOLOGY
STRUCTURED PROGRAMMING USING C**

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which of the following is a valid C variable name? a) int b) total marks c) 123number d) Float	K3	CO1
	2	When was C programming developed? a) The 1950s b) The 1960s c) The 1980s d) The 1970s	K3	CO1
2	3	Which header file uses gets()? a) Studio. H b) Stdlib.h c) Conio.h d) math.h	K2	CO2
	4	_____ is an Entry Controlled loop in C programming? a) While loop b) Do while loop c) For loop d) if statement	K2	CO2
3	5	Define the term function? a) Storage b) Code that operates when called c) Unknown variable d) Looping code	K3	CO3
	6	To access the 5th element in the array arr _____ is used? a) arr[4] b) arr(5) c) arr[5] d) arr{4}	K3	CO3
4	7	What is the correct way to declare a pointer to an integer? a) int p; b) int *p; c) pointer int p; d) int &p;	K3	CO4
	8	Which of the following is the correct way to define a union in C? a) union { int x; float y; } b) union1 { int x; float y; }; c) union2 Example { int x, y; }; d) Structure { int x; float y; }	K3	CO4
5	9	_____ function is used to move the file pointer to a specific location? a) rewind() b) fmove() c) fseek() d) goto()	K6	CO5
	10	_____ function is used to open a file in C? a) fopen() b) openfile() c) fileopen() d) startfile()	K6	CO5

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	What is the need of Data type and explain the various types of data type in C?	K3	CO1
		(OR)		
	11.b.	Write short notes on various types of operators in C Programming		

Cont...

2	12.a.	Discuss about the commonly used input and output functions in C	K2	CO2
	(OR)			
	12.b.	Explain the switch statement in C. Write a program to demonstrate the use of a switch statement with at least three different cases and a default case		
3	13.a.	Differentiate between call by value and call by reference in C	K3	CO3
	(OR)			
	13.b.	Write short notes on storage classes in C.		
4	14.a.	What is a string in C? Explain about reading and writing a string.	K3	CO4
	(OR)			
	14.b.	What is the difference between structure and union in C?		
5	15.a.	Discuss about the concept of Binary file.	K6	CO5
	(OR)			
	15.b.	Briefly discuss about Command Line Parameters in C		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Define tokens? Explain the types of tokens and usage.	K3	CO1
2	17	Explain about decision making and branching statements in C with a suitable example.	K2	CO2
3	18	What are arrays? Classify the types of arrays with an example.	K3	CO3
4	19	Describe dynamic memory allocation and array of pointer with example programs.	K3	CO4
5	20	Discuss about Common File Handling Functions in C.	K6	CO5

Z-Z-Z

END