

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)

Branch- MATHEMATICS WITH COMPUTER APPLICATIONS

PROGRAMMING IN 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 symbol is used to end every C statement? (a) , (b) ; (c) . (d) :	K1	CO1
	2	Show the operator that is used to compare two values if they are equal in C? (a) = (b) == (c) != (d) <=	K2	CO1
2	3	Choose the function that is used to store input from the keyboard? (a) printf() (b) scanf() (c) puts() (d) main()	K1	CO2
	4	Relate the control statement that is best used to execute one block of code when a condition is true, and another when its false. (a) switch (b) if...else (c) break (d) continue	K2	CO2
3	5	An array in C is a collection of _____. (a) Same data type (b) Different data types (c) Functions (d) Files	K1	CO3
	6	Infer from the following, the correct way to pass an array to a function? (a) By value (b) By reference (c) By pointer (d) Both b and c	K2	CO3
4	7	A string in C always ends with _____. (a) \0 (b) \n (c) \t (d) \s	K1	CO4
	8	_____ operator is used to access members of a structure through a pointer. (a) (b) & (c) -> (d) *	K2	CO4
5	9	Choose the function that is used to close a file in C? (a) fopen() (b) fclose() (c) endfile() (d) stop()	K1	CO5
	10	The mode to be used in fopen() to append data to an existing file is _____. (a) r (b) w (c) a (d) None of these	K2	CO5

Cont...

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.	Classify five basic data types in C with examples.	K2	CO1
		(OR)		
	11.b.	Interpret constants in C.		
2	12.a.	Walkthrough a C program to check whether a number is even or odd using if.	K2	CO2
		(OR)		
	12.b.	Illustrate for loop with a simple program as example.		
3	13.a.	Briefly explain recursive function with example.	K2	CO3
		(OR)		
	13.b.	Summarize storage classes in C with example.		
4	14.a.	Write a note on string handling functions in C with example.	K3	CO4
		(OR)		
	14.b.	Develop a note on structures. Why do we use it?		
5	15.a.	Demonstrate a C program to open a file and display its contents.	K2	CO5
		(OR)		
	15.b.	Explain files in C? State the advantages of using files.		

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	Elaborate operators and its types in C with example.	K2	CO1
2	17	Compare and contrast types of if with example.	K2	CO2
3	18	Summarize one dimensional array in C with example.	K2	CO3
4	19	Experiment with passing pointers as function arguments.	K3	CO4
5	20	Rephrase file handling functions in C with example. (fopen, fclose, fprintf, fscanf).	K2	CO5

Z-Z-Z END