

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2024
(First Semester)

Common to Branches - **INFORMATION TECHNOLOGY / COMPUTER
TECHNOLOGY & COMPUTER SCIENCE WITH DATA ANALYTICS**

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)

Question No.	Question	K Level	CO
1	What is the output of the expression 8/3 in C? a) 2.67 b) 3 c) 2 d) 2.66	K1	CO1
2	The conditional operator, also known as _____ a) ternary operator b) binary operator c) nested if d) nested switch	K2	CO1
3	The puts() function returns _____ value a) void b) string c) integer d) null	K1	CO1
4	Which keyword is used to come out of a loop only for a particular iteration? a) break b) continue c) return d) goto	K2	CO2
5	A recursive function without if and else conditions will always lead to _____ a) Finite loop b) Infinite loop c) Incorrect result d) runs only once	K1	CO1
6	_____ variables have the property of preserving their value even after they are out of their scope. a) Auto b) String c) External d) Static	K2	CO1
7	_____ function used to join two words. a) strcpy() b) strcat() c) strncon() d) memcon()	K1	CO1
8	What does the 'sizeof' operator in C return for a union? a) Total size of all union members b) Size of the largest member c) Size of the smallest member d) Size of the union itself	K2	CO2
9	EOF is an integer type defined in stdio.h and has a value _____ a) 1 b) 0 c) NULL d) - 1	K1	CO1
10	Which operator is suitable for turning on or off a particular bit in a number? a) && operator b) & operator c) operator d) ! operator	K2	CO1

Cont...

SECTION - B (35 Marks)

Answer ALL questions

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

Question No.	Question	K Level	CO
11.a.	Analyze about C identifiers and keywords.	K4	CO3
	(OR)		
11.b.	Write a C program to implement simple arithmetic operations.		
12.a.	Develop a C program using gets() and puts().	K3	CO4
	(OR)		
12.b.	Construct a loop using GO TO statement in C.		
13.a.	Apply function prototypes in C.	K3	CO3
	(OR)		
13.b.	Experiment with C storage classes.		
14.a.	Examine string processing.	K4	CO3
	(OR)		
14.b.	Compare structures with union.		
15.a.	Build a C program to implement command line arguments.	K3	CO4
	(OR)		
15.b.	Build a C program to implement bitwise operations.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Question No.	Question	K Level	CO
16	Explain the operators in C.	K5	CO4
17	Discuss about various control statements in C.	K6	CO5
18	Explain about arrays in C.	K5	CO4
19	Discuss about array of pointers in C.	K6	CO5
20	Explain about file handling in C.	K5	CO4

Z-Z-Z

END