

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2024
(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	A ___ is an identifier that is used to represent some specified type of information within a designated portion of a program. (a) Data types (b) Arrays (c) Variables (d) Functions	K1	CO1
	2	Which of the following operators are used to assign the values of an expression to an identifier? (a) Unary (b) Assignment (c) Conditional (d) Logical	K2	CO1
2	3	The ___ statement is used to terminate the loop or exit from a switch. (a) break (b) continue (c) comma (d) goto	K1	CO2
	4	What is the use of getchar()? (a) The next input character each time it is called. (b) EOF when it encounters end of file (c) The next input character each time it is called EOF when it encounters end of file (d) reading character doesn't require a return-type	K2	CO2
3	5	Which of the following is a process by which a function calls itself repeatedly, until some specified condition has been Satisfied? (a) Arguments (b) Recursion (c) Prototypes (d) Structure	K1	CO3
	6	The ___ variables are defined within a function. (a) Automatic (b) Global (c) Storage (d) Static	K2	CO3
4	7	Which of the following is a variable that represents the memory address of another variable as its value? (a) Pointer (b) Array (c) Structure (d) Memory	K1	CO4
	8	The ___ feature allows user to define new data type that are equivalent to existing data type. (a) deftype (b) typedef (c) type (d) new type	K2	CO4
5	9	The ___ is a data type similar to a structure or a union. (a) Enumerations (b) Files (c) String (d) Arguments	K1	CO5
	10	Which function is used to open a file in C? (a) Open() (b) fopen() (c) Fileopen (d) Create	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.	Explain declarations with suitable example.	K2	CO1
	(OR)			
	11.b.	Discuss arithmetic operators with example.		
2	12.a.	Write a c program to calculate simple compound Interest.	K2	CO2
	(OR)			
	12.b.	Discuss for loop with syntax and example.		
3	13.a.	Describe with example how do you passing arguments to a function?	K3	CO3
	(OR)			
	13.b.	Infer automatic variable. Write c program to calculate the factorial of an integer.		
4	14.a.	Explain with syntax and example how do you declare a pointer in C?	K3	CO4
	(OR)			
	14.b.	Write a C program to search a character from given string.		
5	15.a.	Discuss how do you open and close a file in C with example.	K3	CO5
	(OR)			
	15.b.	Write C program to reading a data file.		

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	Illustrate four different types of constants with suitable example.	K2	CO1
2	17	Write a C program to find the average of N numbers using While loop.	K2	CO2
3	18	Illustrate the following (i) Introduction to array (ii) Multidimensional array	K3	CO3
4	19	Compare structure and union with syntax and suitable example.	K3	CO4
5	20	Illustrate Command line arguments with suitable example.	K3	CO5