

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)

Common to Branches - INFORMATION TECHNOLOGY & COMPUTER TECHNOLOGY

PROGRAMMING IN C++

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks

$$(10 \times 1 = 10)$$

Cont.

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	List and explain the key concepts of Object-Oriented Programming. (OR)	K1	CO1
	11.b.	Describe the predefined streams available in C++.		
2	12.a.	Define inline functions with examples. (OR)	K2	CO2
	12.b.	Write a note on copy constructors with example.		
3	13.a.	Which operators cannot be overloaded? Why? (OR)	K3	CO3
	13.b.	Discuss the declaration and applications of an array of pointers.		
4	14.a.	What are virtual functions? Explain with examples. (OR)	K3	CO4
	14.b.	Explain the working of new and delete operators in C++.		
5	15.a.	Explain the difference between templates and macros. (OR)	K4	CO5
	15.b.	Write a C++ program that takes two strings from the user, compares them, and prints whether they are equal, or which one is greater.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	How C++ is more secure compared to C in terms of data handling?	K4	CO1
2	17	State the principles of function overloading with example and mention its precautions.	K3	CO2
3	18	Give a brief description about inheritance and its types.	K1	CO3
4	19	What are the steps for performing file operations? Explain with examples.	K2	CO4
5	20	Define exception handling and provide an example that demonstrates the use of multiple catch statements to handle different types of exceptions.	K3	CO5

Z-Z-Z END