

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

**BSc DEGREE EXAMINATION DECEMBER 2024
(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 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	_____ is a stream connected to standard output. a) cin b) get c) out d) cout	K1	CO1
	2	The _____ is a process by which one object will acquire the properties of another object. a) Inheritance b) Polymorphism c) Abstraction d) None of the above	K2	CO1
2	3	Which of the following access specifier is used as a default in a class definition? a) Public b) Protected c) Private d) Friend	K1	CO2
	4	When two or more function share the same as long as their parameter type are different is called a) Operator overloading b) function overloading c) function overriding d) none of the above	K2	CO2
3	5	To overload an operator _____ keyword must be used along with the operator to be overloaded. a) Over b) Overload c) void d) Operator	K1	CO3
	6	Which inheritance type is used in the class given below? class A : public x, public y a) Multilevel inheritance b) Multiple inheritance c) Hybrid inheritance d) Hierarchical inheritance	K2	CO3
4	7	In C++, dynamic memory allocation is done using _____ operator. a) calloc b) malloc c) new d) delete	K1	CO4
	8	_____ is the file mode for opening a file in output mode. a) ios::in b) ios::out c) ios::trunc d) ios::noreplace	K2	CO4
5	9	An exception is caused by _____. a) a hardware problem b) a problem in the operating system c) a syntax error d) a run-time error	K1	CO5

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	10	What is a template? a) A template is a formula for creating a generic class b) A template is used to manipulate the class c) A template is used for creating the attributes d) none of the above	K2	CO5
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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.	Summarize the advantages of object-oriented programming.	K2	CO1
	(OR)			
	11.b.	Demonstrate streams in C++.		
2	12.a.	Write a C++ program using static variables and functions.	K3	CO2
	(OR)			
	12.b.	Write a C++ program using friend functions.		
3	13.a.	Illustrate the unary operator overloading.	K2	CO3
	(OR)			
	13.b.	Demonstrate the virtual base classes.		
4	14.a.	Elaborate the virtual functions.	K6	CO4
	(OR)			
	14.b.	Discuss the steps for file operation.		
5	15.a.	Elaborate the comparing and exchanging of strings.	K6	CO5
	(OR)			
	15.b.	Discuss the function templates.		

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 formatted and unformatted data.	K6	CO1
2	17	Explain the types of constructors.	K5	CO2
3	18	Explain the binary operator overloading.	K5	CO3
4	19	Demonstrate the random-access operation.	K2	CO4
5	20	Elaborate the exception handling with example.	K6	CO5

Z-Z-Z

END