

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION DECEMEBR 2024
(Second Semester)

Branch - SOFTWARE SYSTEMS (Five Years Integrated)

OBJECT ORIENTED PROGRAMMING WITH 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 feature of OOP indicates code reusability? a) Abstraction b) Polymorphism c) Encapsulation d) Inheritance	K1	CO1
	2	Which header file is required in C++ to use OOP? a) OOP can be used without using any header file b) stdlib.h c) iostream.h d) stdio.h	K2	CO1
2	3	When we define the default values for a function? a) When a function is defined b) When a function is declared c) When the scope of the function is over d) When a function is called	K1	CO2
	4	Which of the following feature is used in function overloading and function with default argument? a) Encapsulation b) Polymorphism c) Abstraction d) Modularity	K2	CO2
3	5	What is the role of a constructor in classes? a) To modify the data whenever required b) To destroy an object c) To initialize the data members of an object when it is created d) To call private functions from the outer world	K1	CO3
	6	How many types of constructors are there in C++? a) 1 b) 2 c) 3 d) 4	K2	CO3
4	7	Which specifier makes all the data members and functions of base class inaccessible by the derived class? a) private b) protected c) public d) both private and protected	K1	CO4
	8	Which is the correct syntax of declaring a virtual function? a) virtual int func(); b) virtual int func{}; c) inline virtual func(); d) inline virtual func{};	K2	CO4
5	9	How Exception handling is implemented in the C++ program? a) Using Exception keyword b) Using try-catch block c) Using Exception block d) Using Error handling schedules	K1	CO5
	10	Which part of the try-catch block is always fully executed? a) try part b) catch part c) finally part d) throw part	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.	Illustrate basic concepts and benefits of OOP.	K4	CO1
	(OR)			
	11.b.	Examine application of OOP.		
2	12.a.	Define function prototyping. Explain with proper example.	K5	CO2
	(OR)			
	12.b.	Define inline function. Explain with suitable example.		
3	13.a.	Illustrate constructor with default arguments.	K4	CO3
	(OR)			
	13.b.	Elaborate dynamic initialization of objects.		
4	14.a.	Develop a C++ program to generate electricity bill using multiple inheritance.	K5	CO4
	(OR)			
	14.b.	Evaluate hybrid inheritance with suitable example.		
5	15.a.	Discuss about dynamic binding with example.	K4	CO5
	(OR)			
	15.b.	Enumerate generic functions and generic classes.		

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	Explain brief history about structure of C++. What are the advantages of C++?	K4	CO1
2	17	Examine static data members and static member function with suitable example.	K5	CO2
3	18	Elucidate overloading unary and binary operator with example.	K4	CO3
4	19	Explain what is the use of inheritance? Give brief notes about multilevel inheritance with example.	K5	CO4
5	20	What is stream class? Determine string I/O and character I/O.	K4	CO5

Z-Z-Z END