23SSP206

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION MAY 2025
(Second Semester)

Branch – **SOFTWARE SYSTEMS (Five Year 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 of the following is not an operator in C++? a) delete b) endl c) :: d) :	K1	CO1
	2	Which of the following is not an object -oriented programming language? a) C b) C++ c) JAVA d) Smalltalk	K1	CO1
2	3	Function overloading is an example for _____ a) Inheritance b) Polymorphism c) binding d) pure virtual function	K2	CO2
	4	A _____ is a function that is expanded in line when it is invoked. a) Static function b) friend function c) inline function d) virtual function	K2	CO2
3	5	How many types of situations may arise in the data conversion between uncompatible types? a) 2 b) 3 c) 4 d) 5	K1	CO3
	6	When the default argument constructor called with no arguments, it becomes a _____. a) constructor b) destructor c) default constructor d) copy constructor	K2	CO3
4	7	A derived class with several base classes is called as _____ Inheritance. a) single b) multiple c) multilevel d) hierarchical	K1	CO4
	8	When defining derived classes, the default Visibility-mode is _____ a) private b) public c) protected d) abstract	K1	CO4
5	9	The keyword _____ is used to preface a block of statements which may generate exceptions. a) try b) catch c) throw d) throws	K1	CO5
	10	Exceptions are peculiar problems that a program may encounter at _____ a) compile time b) run time c) both compile & run time d) closing the program	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 the manipulators in C++ with examples.	K5	CO1
		(OR)		
	11.b.	Describe the control structure in C++ program with suitable example.		
2	12.a.	How do you define a member function in different ways? Explain with example.	K3	CO2
		(OR)		
	12.b.	Describe about arrays of objects with example.		
3	13.a.	Describe about copy constructors.	K4	CO3
		(OR)		
	13.b.	Explain about the destructor with a program.		
4	14.a.	Prepare a program for showing single inheritance.	K4	CO4
		(OR)		
	14.b.	Explain the reason to make the virtual base class. Explain with examples.		
5	15.a.	Describe the need of virtual function with example.	K3	CO5
		(OR)		
	15.b.	Describe function template with example.		

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	Elucidate about basic concepts of object-oriented programming.	K4	CO1
2	17	Point out the characteristics of static member functions with a suitable program.	K4	CO2
3	18	Prepare a program to implement binary operator overloading.	K4	CO3
4	19	Summarise how constructors are implemented when the classes are inherited.	K4	CO4
5	20	Elucidate file pointers and their manipulation.	K4	CO5

Z-Z-Z END