

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION MAY 2023
(Second Semester)

Branch – SOFTWARE SYSTEMS
(Five Years Integrated)

OBJECT ORIENTED PROGRAMMING USING C++

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. What is inheritance in OOPS?
(i) Wrapping data (ii) Deriving new class from existing
(iii) Providing modularity (iv) Efficient coding
2. An inline function is expanded during
(i) Compile time (ii) run time
(iii) never expanded (iv) end of the program
3. Which is the correct example for binary operator?
(i) ++ (ii) —
(iii) Dereferencing operator (iv) +
4. Which of the following is an example for non linear data type?
(i) Tree (ii) Array
(iii) Linked list (iv) Queue
5. Exception handling is implemented in the C++ program using
(i) Exception keyword (ii) try catch block
(iii) Exception block (iv) Error handling schedules

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Bring out the basic concepts of oops.
OR
b. Pin the structure of C++ Program with a small example.
- 7 a. Cover the concept of call by reference with a small note and an example.
OR
b. What is a friend function? Give an example.
- 8 a. Outline the feature of dynamic initialization of objects.
OR
b. Discuss the importance of operator overloading with example.
- 9 a. How the Hybrid inheritance happens. Give the flow diagram.
OR
b. Where the virtual functions are used in C++ program?
- 10 a. Why are templates used in C++ ?
OR
b. List the string functions and give the syntax for copying the string.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11 a. Point out the paradigms in OOPS.

OR

b. Illustrate the list of operators in C++ with examples.

12 a. Formulate the features of Function overloading in C++.

OR

b. State the importance of static member function in C++.

13 a. Connect the points related to constructors in C++.

OR

b. Explain the procedure of overloading binary operators using the friend function.

14 a. Infer the information related to inheritance.

OR

b. Prepare a detailed note regarding polymorphism.

15 a. Discuss the feature of Exception handling in C++.

OR

b. Demonstrate the use of file pointers in C++ with an example.

Z-Z-Z

END