

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2022
(Second Semester)

Branch – STATISTICS

DISCIPLINE SPECIFIC ELECTIVE -I:
PROGRAMMING LANGUAGE FOR STATISTICS (C++)

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. One of the basic concepts in Object Oriented Programming approach is bundling both data and functions into one unit known as —.
(i) Simple variable (ii) object (iii) bundle (iv) both a and b
2. Which of the following shows the Operator overloading feature in C++
(i) Polymorphism (ii) inheritance
(iii) message passing (iv) both a and b
3. Conditional operator (?:) is a handy operator which acts as a shortcut for —
(i) if-else statement (ii) switch statement
(iii) break statement (iv) goto statement
4. Constructors are member functions of a class that have the same name as the —
(i) class name name (ii) data member
(iii) class name (iv) other class data member
5. Virtual functions are primarily used in —
(i) inheritance (ii) operator overloading
(iii) encapsulation (iv) data binding

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

6. (a) What is C++ ?
(OR)
(b) Define Operator Overloading in C++.
7. (a) What is function overloading ?
(OR)
(b) What is Friend function ?
8. (a) What are the types of Constructor in C++?
(OR)
(b) Define destructor with example.
9. (a) Define Inheritance.
(OR)
(b) Define Polymorphism.
10. (a) Define stream class in C++.
(OR)
(b) Define file class in C++.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. (a) Explain the properties and principles of OOP in detail.
(OR)
(b) Explain different operators in C++.
12. (a) Discuss about array of object.
(OR)
(b) Explain about defining member function.
13. (a) What is operator overloading? Explain unary and relational operator overloading
(OR)
(b) Explain about Binary Operator overloading.
14. (a) Elucidate the significance of virtual function in C++
(OR)
(b) Describe in detail Hierarchical and Hybrid Inheritance.
15. (a) Write about unformatted i/o operations (cin and cout objects).
(OR)
(b) Explain different types of files and file functions.

Z-Z-Z END