

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2023
(Second Semester)

Common to Branches – INFORMATION TECHNOLOGY &
COMPUTER TECHNOLOGY

PROGRAMMING IN C++

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

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

- 1 Name the method by which object of one class get the properties of object of another class.
(i) Data Abstraction (ii) Encapsulation
(iii) Inheritance (iv) Polymorphism
- 2 Which of the following operator cannot be overloaded?
(i) ?: (ii) []
(iii) = (iv) ++
- 3 Mention the number of approaches that are used for operator overloading.
(i) 2 (ii) 3
(iii) 4 (iv) 5
- 4 State the member function that is used to determine whether the stream object is currently associated with a file or not.
(i) is_open (ii) buf
(iii) string (iv) is_out
- 5 Which part of the try-catch block is always fully executed?
(i) try part (ii) catch part
(iii) throw part (iv) finally part

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a Bring out the importance of usage of C++.
OR
b State the advantages of OOPs.
- 7 a Sketch about the parts of Functions.
OR
b Produce the advantages and disadvantages of Inline Functions.
- 8 a Explain the rules of Overloading Operators.
OR
b Outline about Overloading Unary Operators.

Cont...

- 9 a Develop a program to use Abstract Class for Program Debugging.
OR
b Prepare a note on File Stream Classes.
- 10 a State about the Principles of Exception Handling.
OR
b Explain about Function Templates with more Arguments.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Analyze on Buffering, Streams and Predefined Streams in C++.
OR
b Discuss in detail about the key concepts of Object Oriented Programming.
- 12 a Survey on the Passing Arguments in Function with suitable examples.
OR
b Select Friend Function and using it write a program to exchange values between two classes.
- 13 a Categorize on Types of Inheritance with examples.
OR
b Write a program to declare virtual base classes. Derive a class using two virtual classes.
- 14 a Summarize your view on Virtual Functions.
OR
b Point out the Steps of File Operations.
- 15 a Examine on Try, Throw and Catch keywords.
OR
b Highlight about Handling String Objects.

Z-Z-Z

END