

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2019
(Fifth Semester)**

Branch - **MATHEMATICS WITH COMPUTER APPLICATIONS**

C++ PROGRAMMING

Time : Three Hours

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Maximum : 75 Marks

SECTION-A (20 Marks!)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 What is an object?
- 2 How extraction operator can be used in Input?
- 3 What are the two ways of creating symbolic constants?
- 4 How an array can be declared?
- 5 What is known as structure members?
- 6 Write the general form of class declaration?
- 7 Define: Destructors.
- 8 List out the types of Conversions.
- 9 What is a Derived Class?
- 10 Write the syntax of Multiple base class?

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Explain the structure of C++ program with diagram.
OR
b Illustrate a simple C++ program and explain its features.
- 12 a Explain scope resolution operator with an example program.
OR
b Write an example program to declare the variables.
- 13 a How can you define Member Functions? Give examples.
OR
b Write a program using Friend function and explain it.
- 14 a Create a program using string, copy constructor and destructor.
OR
b What are the ways to pass the initial values as arguments to the constructor function when an object is declared?
- 15 a Explain hierarchical inheritance with example.
OR
b Assume that Base class B and derived class D. The class B contains one private member, one public data member and three public member functions, the class D contains one private data member and two public member functions. Create a program and generate the output.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Elaborate User-Defined data types with suitable syntax and examples.
- 17 Explain with a program about Default Arguments.
- 18 Demonstrate array of objects and explain it.
- 19 Summarize the different types of data conversions with example.