PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - MATHEMATICS WITH COMPUTER APPLICATIONS

C++ PROGRAMMING

Time : Three Hours   Maximum : 75 Marks

SECTION-A (20 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (1 0 x 2 = 20)

1   What is object oriented programming?
2   Write a note on keywords and identifiers.
3   What are the three types of control structures?
4   What is return by reference?
5   State the general form of a class declaration.
6   Define i) Get data() ii) Put data ( ).
7   List the features for overloading binary operators.
8   Mention the common types of type conversions.
9   How will you define a derived class?
10   Give the syntax of multiple inheritance.

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a Explain the features of object oriented programming.
                          OR
    b Explain the applications of oop.

12 a Describe manipulators.
                          OR
    b Explain If...else statement with example.

13 a Write a short note on memory allocation for objects.
                          OR
    b   List and explain the special characteristics of friendly function.

14 a   List and explain the -special characteristics of constructors.
                          OR
    b Illustrate the concept of destructors.

15 a Describe the syntax of the single inheritance and explain.
                          OR
    b Explain about hybrid inheritance.

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 1 0 = 30)

16   Explain the concept of basic data types.

17   Discuss in detail operators in C++.

18   Explain the following (i) Nesting of member functions (ii) Private
       member functions (iii) Arrays within a class.

19   List and explain the rules for overloading operators.