PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MCA DEGREE EXAMINATION DECEMBER 2018
(Second Semester)

Branch - **COMPUTER APPLICATIONS**

OBJECT ORIENTED PROGRAMMING USING C++

Time: Three Hours   Maximum: 75 Marks

SECTION -A (30 Marks!
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 6 = 30)

1 a Discuss the main advantages of using recursive subprograms with example program code.

OR

b Illustrate the usage of break statement in detail.

2 a Explain the concept of processing with arrays in detail.

OR

b Describe the main characteristics of call by reference with example.

3 a Give an account on pointers and classes.

OR

b Discuss the syntax rules for writing a destructor function.

4 a Illustrate the process of function overloading with arguments.

OR

b Elucidate the general syntax of the virtual function declaration,

5 a Discuss the concept of class templates with example.

OR

b Write short notes on Graph Initialization and closing routines.

SECTION -B (45 Marks)
Answer any **THREE** questions
ALL questions carry **EQUAL** Marks (3 x 1 5 = 45)

6   Explain the various loop structures supported by C++ with example.

7   Describe the various pointer arithmetic operations in detail.

8   Illustrate the following concepts.:
(i) Dynamic memory allocations
(ii) Types of derivation in Inheritance

9   Explain the following concepts with example :
(i) Constructors under Inheritance
(ii) Destructors under Inheritance

10   Discuss the process of Exception Handling with suitable example.

Z-Z-Z   •   END