

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BCA DEGREE EXAMINATION DECEMBER 2019
(Second Semester)

Branch - COMPUTER APPLICATIONS

PROGRAMMING IN C++/OBJECT ORIENTED PROGRAMMING USING C++

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

1 Cin and Cout are the members of

- (i) `stdio.h` (ii) `fstream.h`
(iii) `iostream.h` (iv) `conio.h`

`endl` is a ____ .

- (i) manipulator (ii) escape character
(iii) format specifier (iv) control character

A class can have ____ objects.

- (i) one (ii) 2
(iii) many (iv) 0

The allocation of memory space allotted to a class is carried out by ____ .

- (i) constructor (ii) `calloc`
(iii) `malloc` (iv) destructor

In the given options which is used to shift left the data.

- (i) `<<` (ii) `<`
(iii) `>>` (iv) `<=`

The child mode which inherits the properties of more than one parent is called as ____ .

- (i) multiple (ii) hybrid
(iii) single (iv) complex

____ is example of Dynamic binding.

- (i) class (ii) operator overloading
(iii) virtual function (iv) inline functions

____ is a random file access function.

- (i) `rewind()` (ii) `fopen()`
(iii) `fclose()` (iv) `fread()`

The deviation from the normal flow of operations is called as

- (i) an exception (ii) stack overflow
(iii) divide by zero error (iv) trigger

10 `ifstream.h` is to be included when ____ operations are to be carried one.

- (i) i/o (ii) input
(iii) output (iv) file

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 5 = 25)

11 a Explain formatted console I/O operation.

- 12 a Discuss array of object with an example.
OR
b Describe Friend function with an example.
- »
- 13 a Explain virtual base class with an example.
OR
b Write short notes on new and delete operator with an example.
- 14 a Describe array of pointer with an example.
OR
b Explain command line arguments with an example.
- 15 a Write a detail note on 'working with function template'.
OR
b Discuss exception handling function in detail.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 == 40)

- 16 a Explain key concepts of object oriented programming in detail.
OR
b Discuss on pointers. Explain how pointers are used to access class, arrays and members.
- 17 a Discuss on constructor and destructor in detail.
OR
b Expound on Inline and Friend functions. Explain the functionality of friend function with an example.
- 18 a Describe operator overloading with example.
OR
b Flow the child class inherits the properties of its base class? In what ways it can inherit the properties of its base class? - Analyse.
- 19 a Write a detail note on File Stream Classes.
OR
b Write a detailed note on virtual functions.
- 20 a Explain about working with string in detail.
OR
b Give a detailed notes on the usage of function and class templates.