

A
(21222)
BCA - III Sem.

(Printed Pages 3)
Roll No.

18011

B.C.A. Examination, Dec.-2022

Object Oriented Programming

Using C++

(BCA-301)

Time : Three Hours] [Maximum Marks : 75

Note : Attempt questions from **all** sections
as per instructions.

Section - A

Note : Attempt **all** questions. Each question
carries 3 marks. $3 \times 5 = 15$

1. (a) What is a friend function? Discuss
its pros and cons with respect to
normal member function.

P.T.O.

- (b) What are destructors? When they
are called? What is their utility.
- (c) Write about types of Inheritance in
C++.
- (d) Give difference b/w OOP (Object
Oriented Programming) and POP
(Procedure Oriented Programming)
- (e) Which dynamic memory allocation
functions are used in C++.

Section-B

Note : Attempt any **two** questions. $7.5 \times 2 = 15$

2. Write a program in C++ to find area of
rectangle, triangle and sphere by using
function overloading.
3. Explain the use of ifstream and ofstream
classes for file input and output.
4. Write a program in C++ that includes a
try block and catch block which process
arithmetic exception generated by divide
by-zero error.

18011/2

Section-C

Note : Attempt any **three** questions.

15×3=45

5. Define inline function with example. List benefits and limitation of inline function.
6. Explain file operations for:
 - (i) open
 - (ii) read
 - (iii) close
 - (iv) eof
7. Define constructor and giving example explain its types.
8. Explain C++ data type hierarchy with example.
9. Write a C++ program to overload binary operator '+' to add 2 complex number and display the result.

18011/3