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.   3×5=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 Inheritence 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. 7.5×2=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.

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Section-C

Note : Attempt any **three** questions.

$$15 \times 3 = 45$$

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.

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