

[4]

8. Explain function template and class template with suitable example.
9. What is Polymorphism ? Explain the different types of polymorphism with example.

BCA-301 (N)

Roll No.....

Total No. of Questions : 9]

[Total No. of Printed Page : 4]

BCA-301 (N)

Bachelor of Computer Applications

(Third Semester)

EXAMINATION, MARCH - 2021
(New Course)

Paper First

**OBJECT ORIENTED
PROGRAMMING USING C++**

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from all sections as directed.

Inst. : The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation.

Section -A

(Short Answer Type Questions)

Note : Attempt **all** questions. Each question carries **3** marks.

P.T.O.

[2]

1. (A) What is object-oriented programming ? How it is different from procedure-oriented programming?

(B) Define static function with example.

(C) Differentiate between class and an object.

(D) Explain virtual base Class.

(E) Explain different types of file opening modes.

(F) Explain the need of template.

(G) What is access specifier in C++?

(H) Explain the concept of virtual function.

(I) Write a program to check whether the number is armstrong or not.

Section -B

(Long Answer Type Questions)

Note : Attempt any 2 questions. Each question carries 12

Marks.

BCA -301 (N)

[3]

2. What is constructor ? What are its characteristics ? Also define the types of constructor with example

3. What is operator overloading ? Explain overloading of Unary and binary operator.

4. What is friend function ? Write a program to declare friend function in two class. Calculate the sum of integer of both the classes using friend sum () function.

5. What is multiple inheritance ? Explain with example.

Section-C

(Long Answer Type Questions)

Note : Attempt any 2 questions. Each question carries 12 Marks.

6. What do you mean by exception handling ? Write a program to catch multiple exceptions ?

7. What is template ? Write a program to exchange values of two variable using template.

BCA -301 (N)

P.T.O.