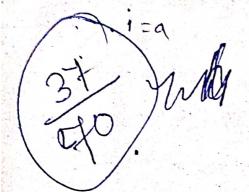
# COPYRIGHT RESERVED UG - BCA (C-2004)



2022(New)

Time: 3 hours

Full Marks: 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Sections as directed.

## Section - A

Answer any four questions of the following:

 $10 \times 4 = 40$ 

1. Define OOPS. Also explain characteristics of OOPS.

Explain various loop control statement in C++ with suitable example.

Define constructor and their types. Explain constructor overloading in C++ with example.

EX - 74/2

(Turn over)

in offer

- 4. Design three classes Student, Marks and Result where Result is inherited from Marks and Marks is inherited from Student. Write possible function to initialize the value and display the details. Also write a main function for execution by creating objects.
  - 5. Write a program in C++ to overload '+' operator to add two complex number.
- O. Define method overloading? Also give an example in C++ to illustrate the same.
  - 7. Design a template class that is used to implement stack of integers or characters. Create 'push' and 'pop' operations along with the printing of stack elements.
  - What do you mean by Exception Handling?
     Write a program to show how it is achieved in C++.

## Section - B

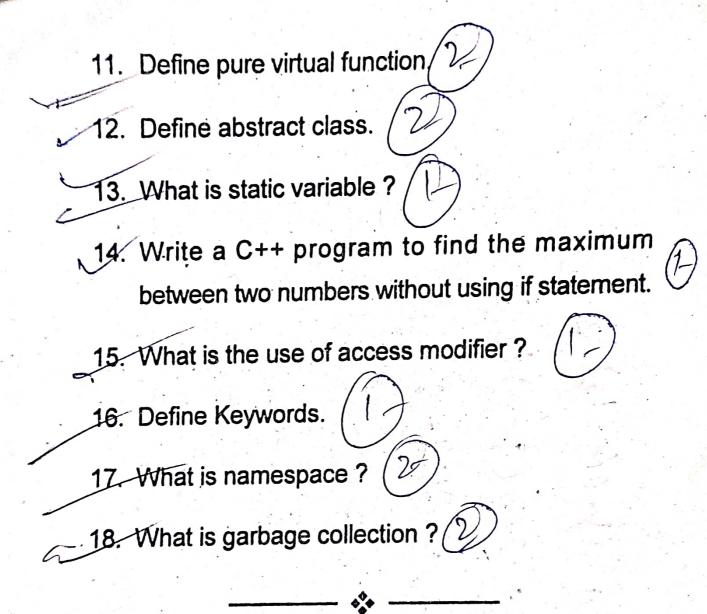
Answer all questions of the following:  $3 \times 10 = 30$ 

9. What is the use of scope resolution operator?



10. What is the use of header file ?





Assigned

## COPYRIGHT RESERVED UG -- BCA (C - 2004)

## 2021

Time: 3 hours

Full Marks: 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Sections as directed.

#### Section - A

Answer any four questions of the following:

 $10 \times 4 = 40$ 

- Differentiate between structured programing and OOP. Also, explain the different characteristics of OOPs.
- Create a class named 'Student' with a string variable 'name' an integer variable 'roll\_no' and

OP - 80/2

(Turn over)

marks' Write a ptogram to store the details of 5 students and display the details of student who has scored maximum marks.

- Define constructor and its types. Explain sonstructor overloading in C++ with example.
- Explain Inheritance and their types with suitable example.
- What is Operator Overloading? Write a program
  in C++ to overload '+' operator to add two
  distance class objects
- Define function overloading using the concept of function overloading. Write a program to find the sum of two numbers.
- 7. Design a template class that is used to implement stack of integers of characters. Create 'push' and 'pop' operations along with the printing of stack elements.

O7 - 80/2 (2) Contd.

What do you mean by Exception Handling?
 Write a program to show how it is achieved in C++.

#### Section - B

Answer all questions:

 $3 \times 10 = 30$ 

- Discuss the use of scope resolution operator.
- 10. Define friend function.
- Differentiate between method overloading and method overriding.
- 12. What is static member function?
- Write a program to find maximum among two numbers without using if-else statement.
- 14. What is Abstract Class?
- Differentiate between late binding and early binding.
- 16. What is namespace?

17. Write a program to print ASCII value of any character.

18. Write down the usage and syntax of following function:

- (a) fopen()
- (b) fgetc()
- (c) fclose()

UG — BCA (C -2004)

## 2019

Time: 3 hours

Full Marks: 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Sections as directed.

#### Section - A

Answer any four questions of the following:

 $10 \times 4 = 40$ 

- Explain briefly characteristics of OOPS and mention advantages of OOPS approach over procedural programming.
- 2. Explain various loop control and jump statement in C++ with suitable example.
- →3 What is Constructor ? Explain the different types of constructor in C++ with example.

- Define Inheritance and their types. Design three classes Student, Test and Result where Result is inherited from Test and Test is inherited from Student. Write possible function to initialize the value. Also write a main function for execution by creating objects.
- Write a programe in C++ to overload '+' operator to add two distance class object.
- Define function overloading using the concept of function overloading. Write a program to find the maximum of two integer numbers.
- 7. Explain class and function template using suitable example in C++ programming.
  - Explain the steps involved in reading and writing a file in a C++ program.

### Section - B

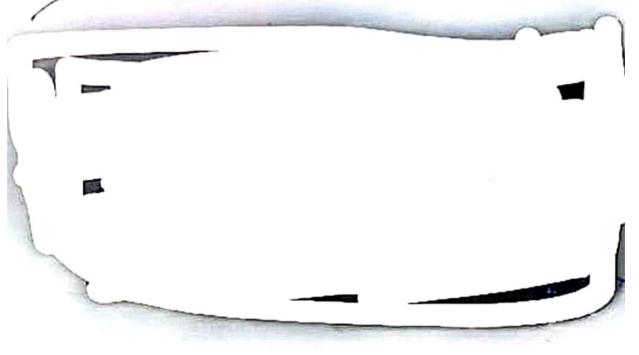
Anawer all the questions of the following:

 $3 \times 10 = 30$ 

- 9. Discuss the use of scope resolution operator.
- 40. Define Inline function.

JY - 79/2

- 11. Differentiate between virtual and pure virtual function.
- Differentiate between function overloading and function overriding.
- 13. What is static member function?
- 14. Write a C++ program to swap two numbers without using third variable.
- 15. What is the use of access specifier?
- 16. What are the advantages of friend function ?
- 17. What is Namespace?
- 18. What is an Exception?



JY-79/2 (100)

(3)

UG — BCA (C -2004)