2023

Full Marks : 60

Time : 3 hours

i. Groups A carries very short answer type compulsory questions.

ii. Answer 3 out of 5 subjective/descriptive questions given in Group B.

iii. Answer **all** sub parts of a questions at one place.

The figures in the right-hand margin indicate marks.

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

GROUP—A

1. Choose the *correct* answer.   1 × 5

(*a*) Which of the following is 'address of operator"

(i)   *

(ii)   &

(iii) ||

(iv)   &&

(b) Identify the correct example for a pre-increment operator.

    (i) $++n$

    (ii) $n++$

    (iii) $--n$

    (iv) $n--$

(c) When can an inline function be expanded ?

    (i)   Compile Time

    (ii)   Run Time

    (iii)   Never get expanded

    (iv)   All of these

(d) Identify the correct function from which the execution of C^{++} program start.

(i) New

(ii) Start ()

(iii) Pow ()

(iv) Main ()

(e) How much bytes of memory does void occupy.

(i) 1

(ii) 0

(iii) 2

(iv) 3

2. Write the difference between class and structure. 5

3. What do you understand about polymorphism in C++. 5

GROUP—B

4. What is constructor in C++ ? Write a program in C++ to use the concept of parametarized constructor. 15

5. What are the different types of Inheritance ? Explain with example.   15

6. What is Function? Use recursive Function to Find the Factorial of a numbers.   15

7. Explain stream classes for files. How to read and write a file in C++.   15

8. Answer of the following: 15

   (a) Virtual Function

   (b) Call-By-Value

   (c) Operator Overloading