

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 all sections as directed.

Section–A

(Compulsory)

1. Pick up the correct alternative for each of the following questions : $10 \times 2 = 20$

(a) Which of the following is the correct syntax of including a user defined header file in C++ ?

- (i) `#include [userdefined]`
- (ii) `#include "userdefined"`
- (iii) `#include <userdefined.h>`
- (iv) `#include <userdefined>`

(b) Which of the following is used for comments in C++ ?

- (i) `/*comment*/`
- (ii) `//comments*/`
- (iii) `//comment`
- (iv) Both (i) & (iii)

(c) Which of the following user defined header file extension used in C++ ?

- (i) hg
- (ii) cpp
- (iii) h
- (iv) hf

- (d) Which of the following is not a type of constructor in C++ ?
- (i) Default
 - (ii) Parameterized
 - (iii) Copy
 - (iv) Friend
- (e) Which of the following approach is used by C++ ?
- (i) Left-right
 - (ii) Right-left
 - (iii) Bottom up
 - (iv) Top down
- (f) Which is more effective while calling the C++ functions ?
- (i) Call by object
 - (ii) Call by pointer

- (iii) Call by value
- (iv) Call by reference
- (g) Which of the following is used to terminate the function declaration in C++ ?
- (i) ;
 - (ii)]
 - (iii))
 - (iv) :
- (h) Which keyword is used to define the macros in C++ ?
- (i) #macro
 - (ii) #define
 - (iii) macro
 - (iv) define

(i) The C++ code which causes abnormal termination/behaviour of a program should be written under ___ block.

(i) catch

(ii) throw

(iii) try

(iv) finally

(j) What is meant by polymorphism ?

(i) Class having only single form

(ii) Class having four forms

(iii) Class having many forms

(iv) Class having two forms

Section-B

Answer any **four** questions :

4×5=20

2. How is C++ different from C language ? What are the object oriented features ?

3. What is the difference between structure and union ? Give example.
4. How are object passed as function arguments ?
What is difference between pass by value and pass by reference ?
5. Give suitable program to describe the idea behind friend function.
6. Write a program to illustrate function overloading.
7. What is token ? Explain the different types of tokens.
8. Differentiate between OOP and POP.

Section-C

Answer any **two** questions of the following :

2×15=30

9. Explain the concept of inheritance ? What are the use of inheritance ? What are the different types available ?

10. What is a operator ? Explain the different operators available.

11. Write C++ program to print the following pattern :

(a) *
* *
* * *
* * * *

(b) 1
1 2
1 2 3
1 2 3 4

12. What is a loop ? What are the different types of loop available ? Explain with example.