

2019

Time : 3 hours

Full Marks : 80

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

The questions are of equal value.

*Answer **five** questions in which Q. No. 1 is compulsory.*

1. Choose the correct alternative of the following :

   (a) The operator which compares two value is :

   (i) Assignment (ii) Relational

   (iii) Unary (iv) Equal

   (b) In which of the following we can not overload the function ?

   (i) Return function

   (ii) Caller

   (iii) Called function

   (iv) None of the above

(c) Constructors are normally used to allocate memory and :

(i) Define variable

(ii) Allocate variable

(iii) Initilize variable

(iv) Initialize object

(d) A derived class with only one base class is called :

(i) Single inheritance

(ii) Multiple inheritance

(iii) Multilevel inheritance

(iv) Hierarchial inheritance

(e) Which type of function among the following shows polymorphism ?

(i) Inline function

(ii) Virtual function

(iii) Undefined function

(iv) Class member function

(f) What among following is a generic class ?

(i) Function template

(ii) Class template

(iii) Inherited template

(iv) None of the above

(g) Which is the universal exception handler class ?

(i) Object (ii) Math

(iii) Errors (iv) Exceptions

(h) Which among following is correct syntax of closing a file in C++ ?

(i) myfile $ close( );

(ii) myfile @ close( );

(iii) myfile : close( );

(iv) myfile . close( );

2. (a) What do you mean by object-oriented programming ? Explain the key concept of OOPs.

(b) Compare and contrast OOPs language with procedural oriented programming language.

3. What do you mean by inheritance ? Explain the difference between single and multilevel inheritance. Also give the advantages and disadvantages of inheritances.

4. What do you mean by Virtual function ? Explain with example. Explain the difference between virtual function and virtual classes.

5. What do you mean by constructor and destructor ? Explain the characteristics of the constructor and destructor.

6. (a) What do you mean by exception handling ? Explain mechanism of exception handling.

   (b) Explain the two types of exceptions.

7. Explain the standard streams in C++. Now is a stream linked to a file.

8. What are header file ? Why are they important ? Can we write a C++ program without using any header file ? Explain.

9. Write short notes on any **two** the following :

   (a) Polymorphism

   (b) Dynamic memory management

   (c) Generic classes

   (d) Error handling during file operation