

2017

TIME: 3 HOURS

FULL MARKS: 70

Group – A

(Compulsory)

1. Fill in the blanks or choose most appropriate in MCQ: 1 x 15 = 15
- a. The C++ facility that provides a new meaning to an operator is called.....
 - b. The idea of extending an already-defined class is known as.....
 - c. Dynamic binding enables the function to be linked at.....
 - d. have the same name as that of a class.
 - e. The Section where the exception is handled is called.....
 - f. The functions available to all the users are called:
 - i. Private
 - ii. Public
 - iii. Global
 - iv. Protected
 - g. Early binding enables the function to be linked at:
 - i. Run-time
 - ii. Compile-time
 - iii. Load time
 - iv. Link time
 - h. The functions that are not associated with class are.
 - i. Inline
 - ii. Member
 - iii. Non-member
 - iv. Const()
 - i. The arguments used in the function call are known as:
 - i. Dummy arguments
 - ii. Dummy parameters
 - iii. Actual arguments
 - iv. None of these

- j. The constructor body cannot have:
 - i. Malloc statement
 - ii. New statement
 - iii. Return statement
 - iv. Exit statement
- k. It is possible to throw:
 - i. Built in type
 - ii. User-define type
 - iii. Both (i) and (ii)
 - iv. None of these
- l. Two different types of polymorphism are:
 - i. Compile time and link time
 - ii. Link time and load time
 - iii. Run time and compile time
 - iv. Run time and link time
- m. The self () function can have maximum arguments
 - i. One
 - ii. Two
 - iii. Three
 - iv. Any number
- n. Which built in class has been introduced with RTTI:
 - i. Type class
 - ii. Type id class
 - iii. Type info class
 - iv. RTTI-type-class
- o. When a member is protected, it is not different from Unless the class is inherited.

Group – B

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

4 x 5 =20

- 2. List out difference between C function and C++ function.
- 3. What is this pointer? What are its advantages?
- 4. What is constructor? How are they different from normal function?
- 5. When will the destructors be called?
- 6. What are abstract classes? Write a program to define abstract class.
- 7. What is the difference between public and private inheritance?

Group – C

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

7 x 5 = 35

8. What is polymorphism? What is the difference between compile time and run time polymorphism?
9. Differentiate between virtual functions and pure virtual functions.
10. Why do we need RTTI? Suggest some cases where we need to use RTTI.
11. What are streams? Why they are useful?
12. What are Exceptions? Define a class stack and throw an exception when the stack underflow and overflow take place.
13. What is the need for template function in C++? What are their advantages?
14. Write a function for finding the average age of a class student. Pass an array of student objects as a parameter to that function. Assume the default class strength to be 50. Provide default strength as a default argument to the function.