

C++

Year 2010-2013

Answer Any Five Question, Q1 is compulsory

1. Select the correct option from the following :
 - a. C++ language was invented by
 - i. Ken Thompson
 - ii. Dennis Ritche
 - iii. Bjarne Stroustrup
 - iv. None of the above
 - b. The mechanism that follows the same function to act differently an different classes is known as
 - i. Inheritance
 - ii. Polymorphism
 - iii. Encapsulation
 - iv. None of the above
 - c. The existing classes can be reused by
 - i. Inheritance
 - ii. Polymorphism
 - iii. Dynamic binding
 - iv. Abstraction
 - d. The new operator
 - i. Allocates memory
 - ii. Release memory
 - iii. Both (i) & (ii)
 - iv. None of the above
 - e. The c in and c out function require the header file to include
 - i. stdio.h
 - ii. iostream.h
 - iii. iomanip.h
 - iv. None of the above
 - f. Which of the following lop statements uses two keywords?
 - i. do-while loop
 - ii. for loop
 - iii. while loop
 - iv. None of the above
 - g. The loop statement is terminated by a semicolon is
 - i. do-while loop
 - ii. for loop
 - iii. while loop
 - iv. None of the above

- h. The main() function returns an Integer value to
 - i. Operating system
 - ii. Compiler
 - iii. Main () function
 - iv. None of the above
 - i. Encapsulation means
 - i. Protecting data
 - ii. allowing global access
 - iii. Data hiding
 - iv. Both (i) & (ii)
 - j. The size of an object is equal to
 - i. total size of member data variable
 - ii. total size of member function
 - iii. Both (i) & (ii)
 - iv. None of the above
 - k. Constructor and Destructor are automatically invoked by
 - i. Compiler
 - ii. Operating system
 - iii. Main () function
 - iv. None of the above
 - l. consider the equation $z=3*x$ to overload the * operator one of the following function A is used z and x are object of the same class
 - i. friend
 - ii. Virtual
 - iii. Public
 - iv. None of the above
 - m. One of the following operator cannot be overload
 - i. dot operator
 - ii. plus operator
 - iii. ampersand operator
 - iv. operator
 - n. In postfix overloading of operator (++or--) the last argument should have type:
 - i. int
 - ii. void
 - iii. float
 - iv. long
2. What is object oriented programming? How it differs from structured programming? Discuss the characteristics of oops?
 3. (a)What are arrays? How can array initialization be carried out using function?
(b)Write a c++ program to display the sum of odd numbers between 1 to 150?
 4. What do you mean by Inheritance? Describe the difference between single and multilevel inheritance with example.
 5. (a) Define class and struct keyword used in c++ .Also, Explain various

- differences between them?
- (b) Write a C++ program to input 5 float number? Display the number with 6 decimal place?
6. (a) Define and distinguish between operator overloading and function overloading
(b) Write a program to overload == operator, compare two objects using overload operator.
 7. What do you mean by friend function and friend classes? Discuss the properties of friend functions?
 8. (a) Explain the working of virtual function with example.
(b) Giving example distinguish between private member and protected member of a class.
 9. What do you mean by dynamic binding? How can you achieve dynamic binding in c++? Discuss the role of virtual and pure virtual function in this regard?
 10. Write short notes on any two:
 - a. Operator overloading
 - b. features of oops
 - c. system class
 - d. Constructor and Destructor