

## Question Bank

### UNIT 1: Introduction to C++

1.	What is Procedure-oriented Programming System? <b>Dec – 2005</b>
2.	What is Object-oriented Programming System? <b>June – 2006</b>
3.	Explain the console I/O functions supported by C++. <b>Dec-2008</b>
4.	What is reference variable? Explain it with an example. <b>Dec-2009</b>
5.	How does a reference variable differ from pointer variable? <b>June-2010</b>
6.	Explain the concept of function overloading with an example. <b>Dec-2010</b>
7.	What are inline functions? What are its benefits? <b>June-2011</b>
8.	Write a program to find average of n numbers using inline function. <b>Dec-2011</b>

### UNIT 2: Class and Objects - I

1	How does a class differ from a structure? <b>Jan-2006</b>
2	Explain the structure of a C++ class. <b>July-2006</b>
3	What is an object? <b>July-2006</b>
4	What is the use of scope resolution operator? Explain with an example. <b>Jan-2007</b>
5	Explain the various access specifiers available in C++. <b>July-2007</b>
6	Write a brief note on this pointer. <b>July-2007</b>
7	What is a mutable data member? How it differs from static data member. <b>Jan-2008</b>
8	What are inline functions? Explain the different function can be made inline. <b>July-08</b>
9	What are friend functions? Explain <b>July-08</b>
10	What is the use of declaring a class as a friend of another. <b>Jan-09</b>
11	What are static member functions? What is the use of it? <b>Jan-09</b>
12	Why should the static data members be explicitly declared outside the class? <b>June-10</b>
13	What are name spaces? Explain how name spaces enable C++ programming to prevent pollution of global namespaces. <b>June-10</b>
14	What is a nested class? Explain with example <b>Dec-11</b>

**UNIT 3: Classes and Objects -II**

1.	Explain how dynamic memory allocation done in C++? <b>Jan-2005</b>
2.	Explain new operator? <b>Jul-2005</b>
3.	Explain delete operator <b>Jul-2005</b>
4	What us a constructor? List the different types of constructors available un C++. <b>Jan-06</b>
5	How do we unale a construction function? Explain with an example. <b>Jul-06</b>
6	Write short notes on. a) Copy construction. b) B) Parameterized construction. <b>July-06</b>
7	Describe the importance of destructors with an example. <b>Jan-2007</b>
8	Can constructors be overloaded? If yes, explain with an example. <b>Jul-07</b>
9	What is friend function? Why is it needed? <b>Jul-07</b>
10	Demonstrate with a program to [ass object as argument <b>Dec-04</b>
11	How are dynamic objects created? What is the use? <b>Jul-05</b>
12	Write a program to show the application of copy constructor <b>Jul-05</b>
13	How is operator overloading achieved? Show with an example. <b>Dec-05</b>
14	By overloading + , add two complex numbers. <b>Jul-06</b>
15	What is operator overloading? <b>Jul-07</b>
16	Explain the syntax for overloading operators using. i) Member function ii) Friend function <b>Dec-08</b>
17	How does the computer interpret the operator overloading function? <b>Jun-09</b>
18	List some circumstance where is operator overloading is mandatory. <b>Jun-10</b>
19	Explain some of the rules to be followed while overloading operator. <b>Dec-10</b>
20	Explain how increment & decrement operators are overloading in C++. <b>Jun-11</b>
21	How are arithmetic operators overloading using? i) Member function ii) Friend function <b>Dec-11</b>
22	Explain the overloading of ass operator. <b>Jul-12</b>
23	Write short notes on i) Overloading new operator ii) Overloading delete operator <b>Jul-12</b>
24	Explain how the values of () fundamental types converted to class type. <b>Dec-11</b>
25	List & explain the four new style cast operators provided by C++ for typecasting. <b>Dec-05</b>
26	Explain the typed operator of C++. <b>Jan-06</b>

**UNIT 4: Inheritance - I**

1.	What is inheritance? <b>Jan-06,Dec-08, Jul-10</b>
2.	In what ways does inheritance affects the size and behavior of derived class abject. <b>Dec-09</b>
3.	How can the members of base class be accessed in derived class? <b>Jan-05</b>
4.	Can a derived class pointer point to a base class? <b>Jul-07</b>
5.	How can a derived class pointer forcibly made to point at an object of derived class? <b>Jan-04</b>
6.	What do you mean by function over riding of derived class? <b>Dec-06</b>
7.	What are different of inheritance? That is available in C++? <b>Dec-05,07, Jan-09</b>
8.	What is multiple inheritances? What kind of ambiguities does a multiple inheritances lead to? How can they be removed? <b>Jul-09</b>
9.	Write short notes on. a) Multi-level inheritance b) Hybrid level inheritance <b>Dec-11</b>
10.	In which order are the constructors and destructors called when an object of derived class is created? <b>Jul-12</b>

**UNIT 5: Inheritance - II**

1.	What is a virtual function? <b>Jul-08</b>
2.	Explain how dynamic (runtime) poly morphism is achieved using virtual functions. <b>Jan-10</b>
3.	When do we make a virtual function 'Pure'? <b>Jul-10</b>
4.	What is a pure virtual function? Explain with an example. <b>Dec-11</b>
5.	How does the compiler resolve a call to a virtual function? <b>Jul-12</b>

**UNIT 6: Virtual Functions and Polymorphism**

1.	What is a stream? Explain with a neat diagram the C++ class hierarchy for stream handling. <b>Jan-06</b>
2.	Explain text made & binary made LIP w.r.t to i) Character data ii) Numeric data <b>Dec-07</b>
3.	Different between text files & binary file. <b>Jul-06</b>
4.	Explain the various functions available for text ILO in C++. <b>Dec-09</b>
5.	Explain the read () and write () function. <b>Jun-07</b>
6.	Explain the Open () function along with the various modes supported by it. <b>Dec-10</b>
7.	What is a file pointer? How can the file pointers can be explicitly manipulators. <b>Jul-08</b>
8.	Write a short notes on

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## Object Oriented Programming with C++ (10CS36)

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	i) SeekP()    ii) tellP() iii) Seekg()   iv) tellp() <b>Dec-07</b>
9.	How can a file be opened for both reading & writings? <b>Dec-08</b>
10.	What is the difference between opening a file using the constructor of stream class and open () function. <b>Jul-12</b>
11.	Explain with an example, how a file be randomly accessed C++. <b>Jul-09</b>
12.	Write short note on i) eof()   ii) fail()   iii) bad()   iv) Clear(). <b>Jan-10</b>
13.	Explain with suitable examples the pre-defined manipulators available in C++ <b>Dec-11</b>

### UNIT 7: Stream Handling Contd.

1.	What is a function template? Explain with its syntax. <b>Dec-10</b>
2.	WAP to swap two numbers using template. <b>Jul-11</b>
3.	What is a class template? Explain with an example. <b>Dec-11</b>
4.	Write a brief on STL. <b>Jul-12</b>
5.	What a list class? Explain the various functions available this class. <b>Dec-07</b>
6.	Write short notes on i) Vector class    ii) Pair class    iii) Map class    iv) Set class <b>Jul-08</b>
7.	How does multi class and multiuse class differ from map class and set class respectively? <b>Dec-10</b>

### UNIT 8: Exception handling, STL

1.	Give a situation where exception handling is applied. <b>Jul-06</b>
2.	Define exception. <b>Dec-06</b>
3.	What are the options to handle an exception. <b>Dec-07</b>
4.	Write a program to show exception handling. <b>Jun-08</b>
5.	Define and brief on STL. <b>Dec-11</b>
6.	What are containers? Give its application. <b>Jul-07</b>
7.	Give the usage of vectors. <b>Dec-09</b>
8.	Define list. Write a program to construct a list with various options. <b>Jul-12</b>