



**Unit 1 : Introduction to c++**

Q:1) What does a class in C++ holds?

- A:) data
  - B:) functions
  - C:) both data & functions
  - D:) arrays
- Correct: C

Q:2) How many specifiers are present in access specifiers in class?

- A:) 1
  - B:) 2
  - C:) 3
  - D:) 4
- Correct: C

Q:3) Which is used to define the member of a class externally?

- A:) :
  - B:) ::
  - C:) #
  - D:) !!\$
- Correct: B

Q:4) Which other keywords are also used to declare the class other than class?

- A:) struct
  - B:) union
  - C:) object
  - D:) both struct& union
- Correct: D

Q:5) Which of the following is a valid class declaration?

- A:) class A { int x; };
  - B:) class B { }
  - C:) public class A { }
  - D:) object A { int x; };
- Correct: A



- Q:6) The data members and functions of a class in C++ are by default \_\_\_\_\_
- A:) protected
  - B:) private
  - C:) public
  - D:) public & protected
- Correct: B
- Q:7) Constructors are used to \_\_\_\_\_
- A:) initialize the objects
  - B:) construct the data members
  - C:) both initialize the objects & construct the data members
  - D:) delete the objects
- Correct: A
- Q:8) When struct is used instead of the keyword class means, what will happen in the program?
- A:) access is public by default
  - B:) access is private by default
  - C:) access is protected by default
  - D:) access is denied
- Correct: A
- Q:9) Which category of data type a class belongs to?
- A:) Fundamental data type
  - B:) Derived data type
  - C:) User defined derived data type
  - D:) Atomic data type
- Correct: C
- Q:10) Which operator a pointer object of a class uses to access its data members and member functions?
- A:) .
  - B:) ->
  - C:) :
  - D:) ::
- Correct: D



Q:11) How the objects are self-referenced in a member function of that class.

- A:) Using a special keyword object
- B:) Using this pointer
- C:) Using \* with the name of that object
- D:) By passing self as a parameter in the member function

Correct: B

Q:12) What does a mutable member of a class mean?

- A:) A member that can never be changed
- B:) A member that can be updated only if it not a member of constant object
- C:) A member that can be updated even if it a member of constant object
- D:) A member that is global throughout the class

Correct: D

Q:13) Pick the incorrect statement about inline functions in C++?

- A:) They reduce function call overheads
- B:) These functions are inserted/substituted at the point of call
- C:) Saves overhead of a return call from a function
- D:) They are generally very large and complicated function

Correct: D

Q:14) Inline functions are avoided when \_\_\_\_\_

- A:) function contains static variables
- B:) function have recursive calls
- C:) function have loops
- D:) all of the mentioned

Correct: B

Q:15) 10. Pick the correct statement.

- A:) Macros and inline functions are same thing
- B:) Macros looks like function calls but they are actually not
- C:) Inline functions looks like function but they are not
- D:) Inline function are always large

Correct: B



Q:16) Which functions of a class are called inline functions?

- A:) All the functions containing declared inside the class
- B:) All functions defined inside or with the inline keyword
- C:) All the functions accessing static members of the class
- D:) All the functions that are defined outside the class

Correct: B

Q:17) Which keyword is used to define the user defined data types?

- A:) def
- B:) union
- C:) typedef
- D:) type

Correct: C

Q:18) Identify the correct statement.

- A:) typedef does not create different types. It only creates synonyms of existing types
- B:) typedef create different types
- C:) typedef create own types
- D:) typedef will not creates synonyms of existing types

Correct: A

Q:19) What does the data type defined by union will do?

- A:) It allow one different portion of memory to be accessed as same data types
- B:) It allow one same portion of memory to be accessed as same data types
- C:) It allow one different portion of memory to be accessed as different data types
- D:) It allow one same portion of memory to be accessed as different data types

Correct: D

Q:20) What is the syntax of user-defined data types?

- A:) typedefExistingDataTypeNameByUser
- B:) typedefNameByUserExistingDataType
- C:) defNameByUserExistingDataType
- D:) defNameByUserExistingData

Correct: A



Q:21) How many types of user-defined data type are in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:22) What is the scope of typedef defined data types?

- A:) inside that block only
- B:) whole program
- C:) outside the program
- D:) main function

Correct: B

Q:23) How many types of models are available to create the user-defined data type?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: D

Q:24) Where does the object is created?

- A:) class
- B:) constructor
- C:) destructor
- D:) attributes

Correct: A

Q:25) How to access the object in the class?

- A:) scope resolution operator
- B:) ternary operator
- C:) direct member access operator
- D:) resolution operator

Correct: C



Q:26) Which of these following members are not accessed by using direct member access operator?

- A:) public
- B:) private
- C:) protected
- D:) both private & protected

Correct: D

Q:27) Pick out the other definition of objects.

- A:) member of the class
- B:) associate of the class
- C:) attribute of the class
- D:) instance of the class

Correct: D

Q:28) How many objects can present in a single class?

- A:) 1
- B:) 2
- C:) 3
- D:) as many as possible

Correct: D

Q:29) Which special character is used to mark the end of class?

- A:) ;
- B:) :
- C:) #
- D:) \$

Correct: A

Q:30) Pick the other name of operator function.

- A:) function overloading
- B:) operator overloading
- C:) member overloading
- D:) object overloading

Correct: B



Q:31) Which of the following operators can't be overloaded?

- A:) ::
- B:) +
- C:) -
- D:) []

Correct: A

Q:32) How to declare operator function?

- A:) operator sign
- B:) operator
- C:) name of the operator
- D:) name of the class

Correct: A

Q:33) Which of the following statements is NOT valid about operator overloading?

- A:) Only existing operators can be overloaded
- B:) The overloaded operator must have at least one operand of its class type
- C:) The overloaded operators follow the syntax rules of the original operator
- D:) None of the mentioned

Correct: B

Q:34) Operator overloading is \_\_\_\_\_

- A:) making c++ operator works with objects
- B:) giving new meaning to existing operator
- C:) making the new operator
- D:) adding operation to the existing operators

Correct: D

Q:35) What is operator overloading in C++?

- A:) Overriding the operator meaning by the user defined meaning for user defined data type
- B:) Redefining the way operator works for user defined types
- C:) Ability to provide the operators with some special meaning for user defined data type
- D:) All of the mentioned

Correct: D



Q:36) What is the syntax of overloading operator + for class A?

- A:) A operator+(argument\_list){ }
- B:) A operator[+](argument\_list){ }
- C:) int +(argument\_list){ }
- D:) int [+](argument\_list){ }

Correct: A

Q:37) How many approaches are used for operator overloading?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:38) Which of the following operator cannot be overloaded?

- A:) +
- B:) ?:
- C:) –
- D:) %

Correct: B

Q:39) Which of the following operator can be overloaded?

- A:) ?:
- B:) ::
- C:) .
- D:) ==

Correct: D

Q:40) Which of the following operator cannot be used to overload when that function is declared as friend function?

- A:) -=
- B:) ||
- C:) ==
- D:) []

Correct: D





Q:41) 10. Which of the following operator can be used to overload when that function is declared as friend function?

A:) []

B:) ()

C:) ->

D:) |=

Correct: D

Q:42) In case of non-static member functions how many maximum object arguments a unary operator overloaded function can take?

A:) 1

B:) 2

C:) 3

D:) 0

Correct: D

Q:43) In case of non-static member functions how many maximum object arguments a binary operator overloaded function can take?

A:) 1

B:) 2

C:) 3

D:) 0

Correct: A

Q:44) In the case of friend operator overloaded functions how many maximum object arguments a unary operator overloaded function can take?

A:) 1

B:) 2

C:) 3

D:) 0

Correct: A



Q:45) In the case of friend operator overloaded functions how many maximum object arguments a binary operator overloaded function can take?

A:) 1

B:) 2

C:) 3

D:) 0

Correct: B

Q:46) What is a binary operator?

A:) Operator that performs its action on a single operand

B:) Operator that performs its action on two operand

C:) Operator that performs its action on three operand

D:) Operator that performs its action on any number of operands

Correct: B

Q:47) Which is the correct example of a binary operator?

A:) ++

B:) —

C:) Dereferencing operator(\*)

D:) +

Correct: D

Q:48) Which is the correct example of a unary operator?

A:) &

B:) ==

C:) —

D:) /

Correct: C

Q:49) Which is called ternary operator?

A:) ?:

B:) &&

C:) |||

D:) ===

Correct: A



Q:50) Which is the correct statement about operator overloading?

- A:) Only arithmetic operators can be overloaded
- B:) Only non-arithmetic operators can be overloaded
- C:) Precedence of operators are changed after overlaoding
- D:) Associativity and precedence of operators does not change

Correct: D





## UNIT 2 : Beginning with C++

Q:1) Pick the incorrect statements out of the following.

- A:) Operator overloading does not disturbs the precedence of operators
- B:) Arity of operators can be changed using operator overloading
- C:) No new operators can be created
- D:) All of the mentioned

Correct: B

Q:2) Which header file is used to declare the complex number?

- A:) complexnum
- B:) complex
- C:) complex number
- D:) complexarg

Correct: B

Q:3) How to declare the complex number?

- A:) (3, 4)
- B:) complex(3, 4)
- C:) (3, 4i)
- D:) (3, 4g)

Correct: B

Q:4) How many real types are there in complex numbers?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:5) Which of the following is not a function of complex values?

- A:) real
- B:) imag
- C:) norm
- D:) Cartesian

Correct: D



Q:6) What is the return type of the conversion operator?

- A:) void
  - B:) int
  - C:) float
  - D:) no return type
- Correct: D

Q:7) Why we use the “dynamic\_cast” type conversion?

- A:) result of the type conversion is a valid
  - B:) to be used in low memory
  - C:) result of the type conversion is an invalid
  - D:) it is used for storage
- Correct: A

Q:8) Why we use the “dynamic\_cast” type conversion?

- A:) result of the type conversion is a valid
  - B:) to be used in low memory
  - C:) result of the type conversion is an invalid
  - D:) it is used for storage
- Correct: A

Q:9) How many parameters does a conversion operator may take?

- A:) 0
  - B:) 1
  - C:) 2
  - D:) as many as possible
- Correct: A

Q:10) How are types therein user-defined conversion?

- A:) 1
  - B:) 2
  - C:) 3
  - D:) 4
- Correct: B



Q:11) Pick out the correct syntax of operator conversion.

- A:) operator float()const
- B:) operator float()
- C:) operator const
- D:) operator const()

Correct: A

Q:12) Which rule will not affect the friend function?

- A:) private and protected members of a class cannot be accessed from outside
- B:) private and protected member can be accessed anywhere
- C:) protected member can be accessed anywhere

Correct: A

Q:13) Which keyword is used to declare the friend function?

- A:) firend
- B:) friend
- C:) classfriend
- D:) myfriend

Correct: B

Q:14) What is the syntax of friend function?

- A:) friend class1 Class2;
- B:) friend class;
- C:) friend class
- D:) friend class()

Correct: A

Q:15) Pick out the correct statement.

- A:) A friend function may be a member of another class
- B:) A friend function may not be a member of another class
- C:) A friend function may or may not be a member of another class
- D:) None of the mentioned

Correct: C



Q:16) Where does keyword 'friend' should be placed?

- A:) function declaration
- B:) function definition
- C:) main function
- D:) block function

Correct: A

Q:17) What is a friend function in C++?

- A:) A function which can access all the private, protected and public members of a class
- B:) A function which is not allowed to access any member of any class
- C:) A function which is allowed to access public and protected members of a class
- D:) A function which is allowed to access only public members of a class

Correct: A

Q:18) Pick the correct statement.

- A:) Friend functions are in the scope of a class
- B:) Friend functions can be called using class objects
- C:) Friend functions can be invoked as a normal function
- D:) Friend functions can access only protected members not the private members

Correct: C

Q:19) Which of the following is correct about friend functions?

- A:) Friend functions use the dot operator to access members of a class using class objects
- B:) Friend functions can be private or public
- C:) Friend cannot access the members of the class directly
- D:) All of the mentioned

Correct: A

Q:20) Which keyword is used to represent a friend function?

- A:) friend
- B:) Friend
- C:) friend\_func
- D:) Friend\_func

Correct: D



Q:21) When we are using heap operations what do we need to do to save the memory?

- A:) rename the objects
- B:) delete the objects after processing
- C:) both rename & delete the objects
- D:) add the objects

Correct: B

Q:22) Which container in c++ will take large objects?

- A:) string
- B:) class
- C:) vector
- D:) string & class

Correct: C

Q:23) How to stop your program from eating so much ram?

- A:) Find a way to work with the data one at a time
- B:) Declare it in program memory, instead of on the stack
- C:) Use the hard drive, instead of RAM
- D:) All of the mentioned

Correct: D

Q:24) Which option is best to eliminate the memory problem?

- A:) use smart pointers
- B:) use raw pointers
- C:) use virtual destructor
- D:) use smart pointers & virtual destructor

Correct: D

Q:25) Which is used to pass the large objects in c++?

- A:) pass by value
- B:) pass by reference
- C:) both pass by value & reference
- D:) pass by name

Correct: B





Q:26) What are the essential operators in c++?

- A:) +
- B:) |
- C:) <=
- D:) All of the mentioned

Correct: D

Q:27) In which direction does the assignment operation will take place?

- A:) left to right
- B:) right to left
- C:) top to bottom
- D:) bottom to top

Correct: B

Q:28) Pick out the compound assignment statement.

- A:)  $a = a - 5$
- B:)  $a = a / b$
- C:)  $a -= 5$
- D:)  $a = a + 5$

Correct: C

Q:29) What is the associativity of add(+);?

- A:) right to left
- B:) left to right
- C:) right to left & left to right
- D:) top to bottom

Correct: B

Q:30) What is the name of | operator?

- A:) sizeof
- B:) or
- C:) and
- D:) modulus

Correct: B



Q:31) Which operator is having the highest precedence in c++?

- A:) array subscript
- B:) Scope resolution operator
- C:) static\_cast
- D:) dynamic\_cast

Correct: B

Q:32) subscript operator is used to access which elements?

- A:) string
- B:) char
- C:) array
- D:) float

Correct: C

Q:33) How many arguments will the subscript operator will take for overloading?

- A:) 1
- B:) 2
- C:) 0
- D:) as many as possible

Correct: A

Q:34) Pick out the correct statement.

- A:) subscript operator has a higher precedence than the assignment operator
- B:) subscript operator has a lower precedence than the assignment operator
- C:) subscript operator is used with string elements
- D:) subscript operator is used with char elements

Correct: A

Q:35) What do we need to do to pointer for overloading the subscript operator?

- A:) reference pointer
- B:) dereference pointer
- C:) store it in heap
- D:) memory locator

Correct: B



Q:36) What do we need to use when we have multiple subscripts?

- A:) operator()
- B:) operator[]
- C:) operator
- D:) operator<>

Correct: A

Q:37) What is the use of function call operator?

- A:) overloading the methods
- B:) overloading the objects
- C:) overloading the parameters
- D:) overloading the string

Correct: B

Q:38) Pick out the correct statement.

- A:) virtual functions does not give the ability to write a templated function
- B:) virtual functions does not give the ability to rewrite a templated function
- C:) virtual functions does give the ability to write a templated function
- D:) virtual functions does not give the ability to rewrite a simple function

Correct: A

Q:39) What will happen when the function call operator is overloaded?

- A:) It will not modify the functions
- B:) It will modify the functions
- C:) It will modify the object
- D:) It will modify the operator to be interpreted

Correct: D

Q:40) In which form does the function call operator can be overloaded?

- A:) static member function
- B:) non-static member function
- C:) dynamis\_cast
- D:) static\_cast

Correct: B



Q:41) What is the use of functor?

- A:) It makes the object “callable” like a function
- B:) It makes the class “callable” like a function
- C:) It makes the attribute “callable” like a function
- D:) It makes the argument “callable” like a function

Correct: A

Q:42) Which is used to tell the computer that where a pointer is pointing to?

- A:) dereference
- B:) reference
- C:) heap operations
- D:) binary operations

Correct: A

Q:43) Which is used to do the dereferencing?

- A:) pointer without asterix
- B:) value without asterix
- C:) pointer with asterix
- D:) value with asterix

Correct: C

Q:44) Pick out the correct option.

- A:) References automatically dereference without needing an extra character
- B:) References automatically dereference with an extra character
- C:) Reference will not dereference
- D:) Reference automatically dereference with extra space and character

Correct: A

Q:45) What does the dereference operator will return?

- A:) rvalue equivalent to the value at the pointer address
- B:) lvalue equivalent to the value at the pointer address
- C:) it will return nothing
- D:) it will return boolean values

Correct: B



Q:46) Pick out the correct statement.

A:) the null pointer dereference occurs where a pointer that is expected to be a valid address but instead is equal to null

B:) the null pointer dereference occurs where a pointer that is expected to be a valid address but instead is equal to the memory address

C:) rvalue equivalent to the value at the pointer address

D:) null pointer will not return anything

Correct: A

Q:47) Which operator works only with integer variables?

A:) increment

B:) decrement

C:) both increment & decrement

D:) binary operator

Correct: C

Q:48) How many types are there in increment/decrement operator?

A:) 1

B:) 2

C:) 3

D:) 4

Correct: B

Q:49) Pick out the correct statement.

A:) Increment operator ++ adds 1 to its operand

B:) Increment operator ++ adds 2 to its operand

C:) Decrement operator -- subtracts 1 to its operand

D:) Decrement operator -- subtracts 3 to its operand

Correct: A

Q:50) Pick out the correct statement.

A:) Pre Increment is faster than post-increment

B:) post-increment is faster than Pre Increment

C:) pre increment is slower than post-increment

D:) pre decrement is slower than post-increment

Correct: A



**UNIT 3 : Class and Objects**

Q:1) Which method do we use to append more than one character at a time?

- A:) append
  - B:) operator+=
  - C:) data
  - D:) both append & operator+=
- Correct: D

Q:2) What is string objects in C++?

- A:) Stream of alphabets
  - B:) A stream of well-defined characters
  - C:) Stream of characters
  - D:) A stream of characters terminated by \0
- Correct: B

Q:3) What is Character-Array?

- A:) array of alphabets
  - B:) array of well-defined characters
  - C:) array of characters
  - D:) array of characters terminated by \0
- Correct: C

Q:4) Pick the incorrect statement about Character-Array.

- A:) Character-Array can be terminated by a null character('\0')
  - B:) Character-Array has a static size
  - C:) Character-Array has a dynamic size
  - D:) Character-Array has a threat of array-decay
- Correct: B

Q:5) Pick the correct statement about string objects in C++.

- A:) String objects must be terminated by a null character('\0')
  - B:) String objects have a static size
  - C:) String objects have a dynamic size
  - D:) String objects use extra memory than required.
- Correct: C



Q:6) Which header file is used to include the string object functions in C++?

- A:) #include <string.h>
- B:) #include <cstring>
- C:) #include <string>
- D:) #include <string.cpp>

Correct: C

Q:7) Which of the following is not a modifier function in string class?

- A:) operator+=()
- B:) operator[]()
- C:) push\_back()
- D:) erase()

Correct: C

Q:8) Which function is used to get the length of a string object?

- A:) str.length()
- B:) str.size()
- C:) str.max\_size()
- D:) both size() and length() function

Correct: D

Q:9) What is the identifier given to string class to declare string objects?

- A:) String
- B:) string
- C:) STRING
- D:) Any of the above can be used

Correct: B

Q:10) What is the role of a constructor in classes?

- A:) To modify the data whenever required
- B:) To destroy an object
- C:) To initialize the data members of an object when it is created
- D:) To call private functions from the outer world

Correct: C





- Q:11) Why constructors are efficient instead of a function `init()` defined by the user to initialize the data members of an object?
- A:) Because user may forget to call `init()` using that object leading segmentation fault
  - B:) Because user may call `init()` more than once which leads to overwriting values
  - C:) Because user may forget to define `init()` function
  - D:) All of the mentioned
- Correct: D
- Q:12) What is a copy constructor?
- A:) A constructor that allows a user to move data from one object to another
  - B:) A constructor to initialize an object with the values of another object
  - C:) A constructor to check the whether to objects are equal or not
  - D:) A constructor to kill other copies of a given object.
- Correct: B
- Q:13) What happens if a user forgets to define a constructor inside a class?
- A:) Error occurs
  - B:) Segmentation fault
  - C:) Objects are not created properly
  - D:) Compiler provides a default constructor to avoid faults/errors
- Correct: D
- Q:14) How many parameters does a default constructor require?
- A:) 1
  - B:) 2
  - C:) 0
  - D:) 3
- Correct: C
- Q:15) How constructors are different from other member functions of the class?
- A:) Constructor has the same name as the class itself
  - B:) Constructors do not return anything
  - C:) Constructors are automatically called when an object is created
  - D:) All of the mentioned
- Correct: D





Q:16) How many types of constructors are there in C++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:17) What is the role of destructors in Classes?

- A:) To modify the data whenever required
- B:) To destroy an object when the lifetime of an object ends
- C:) To initialize the data members of an object when it is created
- D:) To call private functions from the outer world

Correct: B

Q:18) What is syntax of defining a destructor of class A?

- A:) A(){}
- B:) ~A(){}
- C:) A::A(){}
- D:) ~A(){};

Correct: B

Q:19) When destructors are called?

- A:) When a program ends
- B:) When a function ends
- C:) When a delete operator is used
- D:) All of the mentioned

Correct: D

Q:20) What is the difference between constructors and destructors?

- A:) They have a different function name
- B:) Constructors does not have return type whereas destructors do have
- C:) Constructors allow function parameters whereas destructors do not
- D:) Constructors does not function parameters

Correct: C



Q:21) How many Destructors are allowed in a Class?

- A:) 1
- B:) 2
- C:) 3
- D:) Any number

Correct: A

Q:22) Which of the following constructors are provided by the C++ compiler if not defined in a class?

- A:) Default constructor
- B:) Assignment constructor
- C:) Copy constructor
- D:) All of the mentioned

Correct: D

Q:23) When a copy constructor is called?

- A:) When an object of the class is returned by value
- B:) When an object of the class is passed by value to a function
- C:) When an object is constructed based on another object of the same class
- D:) All of the mentioned

Correct: D

Q:24) How destructor overloading is done?

- A:) By changing the number of parameters
- B:) By changing the parameters type
- C:) By changing both the number of parameters and their type
- D:) No chance for destructor overloading

Correct: D

Q:25) Which of the following is correct?

- A:) Destructors can be virtual
- B:) There can be more than one destructor in a class
- C:) Destructor definition starts with !
- D:) Destructor is used to initialize objects

Correct: A



Q:26) Where is the derived class is derived from?

- A:) derived
- B:) base
- C:) both derived & base
- D:) class

Correct: B

Q:27) Pick out the correct statement.

- A:) A derived class's constructor cannot explicitly invokes its base class's constructor
- B:) A derived class's destructor cannot invoke its base class's destructor
- C:) A derived class's destructor can invoke its base class's destructor
- D:) A derived class's destructor can invoke its base & derived class's destructor

Correct: B

Q:28) Which of the following can derived class inherit?

- A:) members
- B:) functions
- C:) both members & functions
- D:) class

Correct: C

Q:29) Which operator is used to declare the destructor?

- A:) #
- B:) ~
- C:) @
- D:) \$

Correct: B

Q:30) Which constructor will initialize the base class data member?

- A:) derived class
- B:) base class
- C:) class
- D:) derived & base class

Correct: B



Q:31) Which class is used to design the base class?

- A:) abstract class
- B:) derived class
- C:) base class
- D:) derived & base class

Correct: A

Q:32) Which is used to create a pure virtual function?

- A:) \$
- B:) =0
- C:) &
- D:) !

Correct: B

Q:33) Which is also called as abstract class?

- A:) virtual function
- B:) pure virtual function
- C:) derived class
- D:) base class

Correct: B

Q:34) What is meant by pure virtual function?

- A:) Function which does not have definition of its own
- B:) Function which does have definition of its own
- C:) Function which does not have any return type
- D:) Function which does not have any return type & own definition

Correct: A

Q:35) Pick out the correct option.

- A:) We cannot make an instance of an abstract base class
- B:) We can make an instance of an abstract base class
- C:) We can make an instance of an abstract super class
- D:) We can make an instance of an abstract derived class

Correct: A

Q:36) Where does the abstract class is used?

- A:) base class only



- B:) derived class
  - C:) both derived & base class
  - D:) virtual class
- Correct: A

Q:37) What is an abstract class in C++?

- A:) Class specifically used as a base class with atleast one virtual functions
  - B:) Class specifically used as a base class with atleast one pure virtual functions
  - C:) Class from which any class is derived
  - D:) Any Class in C++ is an abstract class
- Correct: B

Q:38) What is a pure virtual function in C++?

- A:) A virtual function defined in a base class
  - B:) A virtual function declared in a base class
  - C:) Any function in a class
  - D:) A function without definition in a base class
- Correct: B

Q:39) Which is the correct syntax of defining a pure virtual function?

- A:) pure virtual return\_typefunc();
  - B:) virtual return\_typefunc() pure;
  - C:) virtual return\_typefunc() = 0;
  - D:) virtual return\_typefunc();
- Correct: C

Q:40) Which is the correct statement about pure virtual functions?

- A:) They should be defined inside a base class
  - B:) Pure keyword should be used to declare a pure virtual function
  - C:) Pure virtual function is implemented in derived classes
  - D:) Pure virtual function cannot implemented in derived classes
- Correct: C



Q:41) Pick the correct statement.

- A:) Pure virtual functions and virtual functions are the same
- B:) Both Pure virtual function and virtual function have an implementation in the base class
- C:) Pure virtual function has no implementation in the base class whereas virtual function may have an implementation in the base class
- D:) The base class has no pure virtual function

Correct: C

Q:42) Which interface determines how your class will be used by another program?

- A:) public
- B:) private
- C:) protected
- D:) void

Correct: A

Q:43) Pick out the correct statement about the override.

- A:) Overriding refers to a derived class function that has the same name and signature as a base class virtual function
- B:) Overriding has different names
- C:) Overriding refers to a derived class
- D:) Overriding has different names & it refers to a derived class

Correct: A

Q:44) How many ways of reusing are there in the class hierarchy?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:45) How many types of class are there in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C



Q:46) Pick out the correct statement about multiple inheritances.

- A:) Deriving a class from one direct base class
- B:) Deriving a class from more than one direct base class
- C:) Deriving a class from more than one direct derived class
- D:) Deriving a class from more than one direct derivedbase class

Correct: B

Q:47) Which concepts does the Pre Increment use?

- A:) call by value
- B:) call by reference
- C:) queue
- D:) call by name

Correct: B

Q:48) How many types of representation are in the string?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:49) What is the header file for the string class?

- A:) #include<ios>
- B:) #include<str>
- C:) #include<string>
- D:) #include<stio>

Correct: C

Q:50) Which is used to return the number of characters in the string?

- A:) length
- B:) size
- C:) both size & length
- D:) name

Correct: C





**UNIT 4 : Constructor and Destructor**

Q:1) What does inheritance allow you to do?

- A:) create a class
- B:) create a hierarchy of classes
- C:) access methods
- D:) create a method

Correct: B

Q:2) What is the syntax of inheritance of class?

- A:) class name
- B:) class name: access specifier
- C:) class name: access specifier class name
- D:) access specifier class name

Correct: C

Q:3) How many kinds of classes are there in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: D

Q:4) What is meant by polymorphism?

- A:) class having many forms
- B:) class having only single form
- C:) class having two forms
- D:) class having four forms

Correct: A

Q:5) How many types of inheritance are there in c++?

- A:) 2
- B:) 3
- C:) 4
- D:) 5

Correct: D





Q:6) What is meant by container ship?

- A:) class contains objects of other class types as its members
- B:) class contains objects of other class types as its objects
- C:) class contains objects of other class types as its members 7 also objects
- D:) class contains objects of other class types as its members 9 also objects

Correct: A

Q:7) How many types of the constructor are there in C++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:8) How many constructors can present in a class?

- A:) 1
- B:) 2
- C:) 3
- D:) multiple

Correct: D

Q:9) What should be the name of the constructor?

- A:) same as the object
- B:) same as the member
- C:) same as the class
- D:) same as the function

Correct: C

Q:10) What does derived class does not inherit from the base class?

- A:) constructor and destructor
- B:) friends
- C:) operator = () members
- D:) all of the mentioned

Correct: D



Q:11) What is a template?

- A:) A template is a formula for creating a generic class
- B:) A template is used to manipulate the class
- C:) A template is used for creating the attributes
- D:) A template is used to delete the class

Correct: A

Q:12) Pick out the correct statement about string template.

- A:) It is used to replace a string
- B:) It is used to replace a string with another string at runtime
- C:) It is used to delete a string
- D:) It is used to create a string

Correct: D

Q:13) How to declare a template?

- A:) tem
- B:) temp
- C:) template<>
- D:) temp()

Correct: C

Q:14) How many types of templates are there in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:15) Which are done by compiler for templates?

- A:) type-safe
- B:) portability
- C:) code elimination
- D:) prototype

Correct: A



Q:16) What may be the name of the parameter that the template should take?

- A:) same as template
- B:) same as class
- C:) same as function
- D:) same as member

Correct: A

Q:17) How many parameters are legal for non-type template?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: D

Q:18) What is a function template?

- A:) creating a function without having to specify the exact type
- B:) creating a function with having an exact type
- C:) creating a function without having blank spaces
- D:) creating a function without class

Correct: A

Q:19) Which is used to describe the function using placeholder types?

- A:) template parameters
- B:) template type parameters
- C:) template type
- D:) type parameters

Correct: B

Q:20) Pick out the correct statement.

- A:) you only need to write one function, and it will work with many different types
- B:) it will take a long time to execute
- C:) duplicate code is increased
- D:) it will take a long time to execute & duplicate code is increased

Correct: A



Q:21) What can be passed by non-type template parameters during compile time?

- A:) int
- B:) float
- C:) constant expression
- D:) string

Correct: C

Q:22) From where does the template class derived?

- A:) regular non-templated C++ class
- B:) templated class
- C:) regular non-templated C++ class or templated class
- D:) main function

Correct: C

Q:23) What are Templates in C++?

- A:) A feature that allows the programmer to write generic programs
- B:) A feature that allows the programmer to write specific codes for a problem
- C:) A feature that allows the programmer to make program modular
- D:) A feature that does not add any power to the language

Correct: A

Q:24) In how many ways templates concept can be used?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:25) What is the difference between normal function and template function?

- A:) The normal function works with any data types whereas template function works with specific types only
- B:) Template function works with any data types whereas normal function works with specific types only
- C:) Unlike a normal function, the template function accepts a single parameter
- D:) Unlike the template function, the normal function accepts more than one parameters

Correct: B



Q:26) Templates simulate which of the following feature?

- A:) Polymorphism
- B:) Abstraction
- C:) Encapsulation
- D:) Inheritance

Correct: A

Q:27) Which keyword is used for the template?

- A:) Template
- B:) template
- C:) Temp
- D:) temp

Correct: B

Q:28) What is the correct syntax of defining function template/template functions?

- A:) `template <class T> void(T A:){cout<<a;}`
- B:) `Template <class T> void(T A:){cout<<a;}`
- C:) `template <T> void(T A:){cout<<a;}`
- D:) `Template <T> void(T A:){cout<<a;}`

Correct: A

Q:29) What is the syntax of class template?

- A:) `template <paramaters> class declaration`
- B:) `Template <paramaters> class declaration`
- C:) `temp <paramaters> class declaration`
- D:) `Temp <paramaters> class declaration`

Correct: A

Q:30) How the template class is different from the normal class?

- A:) Template class generate objects of classes based on the template type
- B:) Template class saves system memory
- C:) Template class helps in making genetic classes
- D:) All of the mentioned

Correct: D



Q:31) How many template parameters are allowed in template classes?

- A:) 1
- B:) 2
- C:) 3
- D:) one or more

Correct: D

Q:32) What is meant by the template parameter?

- A:) It can be used to pass a type as an argument
- B:) It can be used to evaluate a type
- C:) It can of no return type
- D:) It can be used to delete a type

Correct: A

Q:33) Which keyword can be used in template?

- A:) class
- B:) typename
- C:) both class &typename
- D:) function

Correct: C

Q:34) What is the validity of template parameters?

- A:) inside that block only
- B:) inside the class
- C:) whole program
- D:) inside the main class

Correct: A

Q:35) Why we use :: template-template parameter?

- A:) binding
- B:) rebinding
- C:) both binding & rebinding
- D:) reusing

Correct: C



Q:36) Which parameter is legal for non-type template?

- A:) pointer to member
  - B:) object
  - C:) class
  - D:) baseclass
- Correct: A

Q:37) Which of the things does not require instantiation?

- A:) functions
  - B:) non virtual member function
  - C:) member class
  - D:) all of the mentioned
- Correct: D

Q:38) What is meant by template specialization?

- A:) It will have certain data types to be fixed
  - B:) It will make certain data types to be dynamic
  - C:) Certain data types are invalid
  - D:) It will make all data types to be dynamic
- Correct: A

Q:39) Which is similar to template specialization?

- A:) template
  - B:) function overloading
  - C:) function template overloading
  - D:) overloading
- Correct: C

Q:40) Which is called on allocating the memory for the array of objects?

- A:) destructor
  - B:) constructor
  - C:) method
  - D:) class
- Correct: D





Q:41) How many types of specialization are there in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:42) What is another name of full specialization?

- A:) explicit specialization
- B:) implicit specialization
- C:) function overloading template
- D:) overloading template

Correct: C

Q:43) Which is dependant on template parameter?

- A:) base class
- B:) abstract class
- C:) method
- D:) static class

Correct: A

Q:44) Which value is placed in the base class?

- A:) derived values
- B:) default type values
- C:) both default type & derived values
- D:) null value

Correct: B

Q:45) How many bits of memory needed for internal representation of class?

- A:) 1
- B:) 2
- C:) 4
- D:) no memory needed

Correct: D





Q:46) How many kinds of entities are directly parameterized in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:47) How many kinds of parameters are there in C++?

- A:) 1
- B:) 2
- C:) 3
- D:) 5

Correct: C

Q:48) What is the Standard Template Library?

- A:) Set of C++ template classes to provide common programming data structures and functions
- B:) Set of C++ classes
- C:) Set of Template functions used for easy data structures implementation
- D:) Set of Template data structures only

Correct: A

Q:49) What are the containers?

- A:) Containers store objects and data
- B:) Containers stores all the algorithms
- C:) Containers contain overloaded functions
- D:) Containers contain set of Iterators

Correct: A

Q:50) How many Sequence Containers are provided by C++?

- A:) 2
- B:) 3
- C:) 4
- D:) 5

Correct: D



**UNIT 5: Inheritance**

Q:1) What is Inheritance in C++?

- A:) Wrapping of data into a single class
- B:) Deriving new classes from existing classes
- C:) Overloading of classes
- D:) Classes with same names

Correct: B

Q:2) How many specifiers are used to derive a class?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: C

Q:3) Which specifier makes all the data members and functions of base class inaccessible by the derived class?

- A:) private
- B:) protected
- C:) public

Correct: A

Q:4) 4. If a class is derived privately from a base class then \_\_\_\_\_

- A:) no members of the base class is inherited
- B:) all members are accessible by the derived class
- C:) all the members are inherited by the class but are hidden and cannot be accessible
- D:) no derivation of the class gives an error

Correct: C

Q:5) What is a virtual function in C++?

- A:) Any member function of a class
- B:) All functions that are derived from the base class
- C:) All the members that are accessing base class data members
- D:) All the functions which are declared in the base class and is re-defined/overridden by the derived class

Correct: D

Q:6) Which is the correct syntax of declaring a virtual function?

- A:) virtual intfunc();
- B:) virtual intfunc(){};
- C:) inline virtual func();
- D:) inline virtual func(){};



Correct: A

Q:7) Which statement is incorrect about virtual function.

- A:) They are used to achieve runtime polymorphism
- B:) They are used to hide objects
- C:) Each virtual function declaration starts with the virtual keyword
- D:) All of the mentioned

Correct: B

Q:8) The concept of deciding which function to invoke during runtime is called

- A:) late binding
- B:) dynamic linkage
- C:) static binding
- D:) both late binding and dynamic linkage

Correct: D

Q:9) What is a pure virtual function?

- A:) A virtual function defined inside the base class
- B:) A virtual function that has no definition relative to the base class
- C:) A virtual function that is defined inside the derived class
- D:) Any function that is made virtual

Correct: B

Q:10) How many groups of output of operation are there in c++?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:11) Pick out the correct objects about the instantiation of output stream.

- A:) cout
- B:) cerr
- C:) clog
- D:) all of the mentioned

Correct: D



Q:12) What is meant by ofstream in c++?

- A:) Writes to a file
  - B:) Reads from a file
  - C:) Writes to a file & Reads from a file
  - D:) delete a file
- Correct: A

Q:13) How many types of output stream classes are there in c++?

- A:) 1
  - B:) 2
  - C:) 3
  - D:) 4
- Correct: C

Q:14) What must be specified when we construct an object of class ostream?

- A:) stream
  - B:) streambuf
  - C:) memory
  - D:) steamostream
- Correct: B

Q:15) Which operator is used for input stream?

- A:) >
  - B:) >>
  - C:) <
  - D:) <<
- Correct: B

Q:16) Where does a cin stops it extraction of data?

- A:) By seeing a blank space
  - B:) By seeing (
  - C:) By seeing a blank space & (
  - D:) By seeing <
- Correct: A

Q:17) Which is used to get the input during runtime?

- A:) cout
  - B:) cin
  - C:) coi
  - D:) cinout
- Correct: B



Q:18) How many parameters are there in getline function?

A:) 1

B:) 2

C:) 2 or 3

D:) 3

Correct: C

Q:19) What can be used to input a string with blank space?

A:) inline

B:) getline

C:) putline

D:) setline

Correct: B

Q:20) When will the cin can start processing of input?

A:) After pressing return key

B:) BY pressing blank space

C:) After pressing return key & BY pressing blank space

D:) BY pressing delete space

Correct: A

Q:21) Which header file is required to use file I/O operations?

A:) <ifstream>

B:) <ostream>

C:) <fstream>

D:) <iostream>

Correct: C

Q:22) Which of the following is used to create an output stream?

A:) ofstream

B:) ifstream

C:) iostream

D:) fstream

Correct: A

Q:23) Which of the following is used to create a stream that performs both input and output operations?

A:) ofstream

B:) ifstream

C:) iostream

D:) fstream

Correct: D



Q:24) Which of the following is not used as a file opening mode?

- A:) ios::trunc
  - B:) ios::binary
  - C:) ios::in
  - D:) ios::ate
- Correct: A

Q:25) Which of the following statements are correct?

- a. It is not possible to combine two or more file opening mode in open() method.
  - b. It is possible to combine two or more file opening mode in open() method.
  - c. ios::in and ios::out are input and output file opening mode respectively.
- A:) 1, 3
  - B:) 2, 3
  - C:) 3 only
  - D:) 1, 2
- Correct: A

Q:26) By default, all the files in C++ are opened in \_\_\_\_\_ mode.

- A:) Text
  - B:) Binary
  - C:) ISCI
  - D:) VTC
- Correct: B

Q:27) What is the use of ios::trunc mode?

- A:) To open a file in input mode
  - B:) To open a file in output mode
  - C:) To truncate an existing file to half
  - D:) To truncate an existing file to zero
- Correct: A

Q:28) Which of the following is the default mode of the opening using the ofstream class?

- A:) ios::in
  - B:) ios::out
  - C:) ios::app
  - D:) ios::trunc
- Correct: D



Q:29) What is the return type open() method?

- A:) int
  - B:) char
  - C:) bool
  - D:) float
- Correct: B

Q:30) Which of the following is not used to seek file pointer?

- A:) ios::set
  - B:) ios::end
  - C:) ios::cur
  - D:) ios::beg
- Correct: C

Q:31) Which of the following is the default mode of the opening using the ifstream class?

- A:) ios::in
  - B:) ios::out
  - C:) ios::app
  - D:) ios::trunk
- Correct: A

Q:32) Which of the following is the default mode of the opening using the fstream class?

- A:) ios::in
  - B:) ios::out
  - C:) ios::in|ios::out
  - D:) ios::trunk
- Correct: A

Q:33) Which function is used in C++ to get the current position of file pointer in a file?

- A:) tell\_p()
  - B:) get\_pos()
  - C:) get\_p()
  - D:) tell\_pos()
- Correct: C

Q:34) Which function is used to reposition the file pointer?

- A:) moveg()
  - B:) seekg()
  - C:) changep()
  - D:) go\_p()
- Correct: A



Q:35) Which of the following is used to move the file pointer to start of a file?

- A:) ios::beg
- B:) ios::start
- C:) ios::cur
- D:) ios::first

Correct: B

Q:36) What is the use of function call operator?

- A:) overloading the methods
- B:) overloading the objects
- C:) overloading the parameters
- D:) overloading the string

Correct: B

Q:37) Pick out the correct statement.

- A:) virtual functions does not give the ability to write a templated function
- B:) virtual functions does not give the ability to rewrite a templated function
- C:) virtual functions does give the ability to write a templated function
- D:) virtual functions does not give the ability to rewrite a simple function

Correct: A

Q:38) What will happen when the function call operator is overloaded?

- A:) It will not modify the functions
- B:) It will modify the functions
- C:) It will modify the object
- D:) It will modify the operator to be interpreted

Correct: D

Q:39) In which form does the function call operator can be overloaded?

- A:) static member function
- B:) non-static member function
- C:) dynamis\_cast
- D:) static\_cast

Correct: B

Q:40) What is the use of functor?

- A:) It makes the object “callable” like a function
- B:) It makes the class “callable” like a function
- C:) It makes the attribute “callable” like a function
- D:) It makes the argument “callable” like a function

Correct: A





Q:41) Which is used to tell the computer that where a pointer is pointing to?

- A:) dereference
- B:) reference
- C:) heap operations
- D:) binary operations

Correct: A

Q:42) Which is used to do the dereferencing?

- A:) pointer without asterix
- B:) value without asterix
- C:) pointer with asterix
- D:) value with asterix

Correct: C

Q:43) Pick out the correct option.

- A:) References automatically dereference without needing an extra character
- B:) References automatically dereference with an extra character
- C:) Reference will not dereference
- D:) Reference automatically dereference with extra space and character

Correct: A

Q:44) What does the dereference operator will return?

- A:) rvalue equivalent to the value at the pointer address
- B:) lvalue equivalent to the value at the pointer address
- C:) it will return nothing
- D:) it will return boolean values

Correct: B

Q:45) Pick out the correct statement.

- A:) the null pointer dereference occurs where a pointer that is expected to be a valid address but instead is equal to null
- B:) the null pointer dereference occurs where a pointer that is expected to be a valid address but instead is equal to the memory address
- C:) rvalue equivalent to the value at the pointer address
- D:) null pointer will not return anything

Correct: A

Q:46) Which operator works only with integer variables?

- A:) increment
- B:) decrement
- C:) both increment & decrement
- D:) binary operator



Correct: C

Q:47) How many types are there in increment/decrement operator?

- A:) 1
- B:) 2
- C:) 3
- D:) 4

Correct: B

Q:48) Pick out the correct statement.

- A:) Increment operator ++ adds 1 to its operand
- B:) Increment operator ++ adds 2 to its operand
- C:) Decrement operator -- subtracts 1 to its operand
- D:) Decrement operator -- subtracts 3 to its operand

Correct: A

Q:49) Pick out the correct statement.

- A:) Pre Increment is faster than post-increment
- B:) post-increment is faster than Pre Increment
- C:) pre increment is slower than post-increment
- D:) pre decrement is slower than post-increment

Correct: A

Q:50) What does the dereference operator will return?

- A:) rvalue equivalent to the value at the pointer address
- B:) lvalue equivalent to the value at the pointer address
- C:) it will return nothing
- D:) it will return boolean values

Correct: B

