

BCA 206 Object Oriented Concepts through C++

- 1 Who invented OOP?
A Andrea Ferro B Adele Goldberg C **Alan Kay** D Dennis Ritchie
- 2 Which is not a feature of OOP in general definitions?
A Efficient Code B Code reusability C Modularity D **Duplicate**
- 3 When OOP concept did first came into picture?
A **1970** B 1972 C 1980 D none
- 4 Which feature of OOP indicates code reusability?
A **Inheritance** B abstraction C encapsulation D none
- 5 Which header file is required in C++ to use OOP?
A stdio.h B iostream.h C string.h D **none**
- 6 Which among the following doesn't come under OOP concept?
A **Platform independent** B dynamic binding C message passing D all
- 7 The feature by which one object can interact with another object is _____
A dynamic binding B **message passing** C both D none
- 8 How many types of access specifiers are provided in OOP (C++)?
A **3** B 2 C 1 D 4
- 9 In multilevel inheritance, which is the most significant feature of OOP used?
A efficiency B **reusability** C readability D all
- 10 Which among the following can show polymorphism?
A Overloading && B **Overloading <<** C Overloading & D none
- 11 Hiding the implementation and showing only the features is called
A **abstraction** B inheritance C polymorphism D all
- 12 In which access specifier should a constructor be defined
A **public** B private C protected D all
- 13 Which access specifier is usually used for data members of a class?
A **private** B public C protected D none
- 14 How to access data members of a class?
A **. or -> as need** B . C -> D ;
- 15 By default the data members of a class is
A public B **private** C both D none
- 16 Which feature of OOP reduces the use of nested classes?
A **inheritance** B abstraction C class D all
- 17 Which of the following is not a property of an object?
A property B identity C **name** D attribute
- 18 Where is the memory allocated for the objects?
A **RAM** B ROM C Cache D HDD
- 19 Which of the following is not an OOPS concept?
A Inheritance B abstraction C **Exception** D all
- 20 Which among the following feature is not in the general definition of OOPS?

- A Modularity B Efficient Code C Code reusability D **redundancy**
- 21 Which feature of OOPS derives the class from another class?
A **inheritance** B data hiding C polymorphism D none
- 22 A single program of OOPS contains _____ classes?
A 1 B 2 C **any number** D 3
- 23 Which function best describe the concept of polymorphism in programming languages?
A **virtual function** B inline C user defined D friend function
- 24 What is the extra feature in classes which was not in the structures?
A **member function** B public access C data member D all
- 25 How many types of polymorphism in the C++ programming language?
A 3 B **2** C 4 D 5
- 26 Which of the following feature is also known as run-time binding or late binding?
A Data binding B loading C **dynamic binding** D all
- 27 Which of the following OOP concept binds the code and data together and keeps them secure from the outside world?
A **Encapsulation** B abstraction C inheritance D all
- 28 If a function can perform more than 1 type of tasks, where the function name remains same, which feature of OOP is used here?
A **polymorphism** B data hiding C inheritance D none
- 29 Inheritance allowed
A readability B **reusability** C improvement D all
- 30 Object is a
A **instance of class** B data type C class D all
- 31 Class is a
A **user defined data type** B object C instance D none
- 32 A class can have ____objects
A 1 B 2 C 3 D **any number**
- 33 If different properties and functions of a real world entity is grouped or embedded into a single element, what is it called in OOP language?
A inheritance B **Encapsulation** C binding D all
- 34 Which feature may be violated if we don't use classes in a program?
A object B inheritance C abstraction D **all**
- 35 _____ underlines the feature of Polymorphism in a class.
A friend B **virtual function** C inline D
- 36 Exception handling is a feature of OOP.
A **True** B False
- 37 Which definition best describes an object?
A **instance of class** B instance of itself C child of a class D all
- 38 The object can't be _____
A Passed by reference B Passed by value C Passed by copy D **Passed by function**
- 39 What is size of the object of following class (64 bit system)?
class student { int rollno; char name[20]; };
A **24** B 20 C 22 D 28

- 40 Functions can't return objects.
A True B **False**
- 41 Which among the following is correct?
A class s{ }; B Class s{ } C class a() D all
- 42 Which member of the superclass is never accessible to the subclass?
A **private member** B public C protected D all
- 43 What is the size of a class?
A 1 byte B 2 C 3 D No size of a class
- 44 Which class cannot create its instance?
A Parent B nested C **abstract** D none
- 45 Encapsulation adds the function in a user-defined structure.
A True B **false**
- 46 Which of the following variable violates the definition of encapsulation?
A Local B **global** C public D array
- 47 How can the concept of encapsulation be achieved in the program?
A **access specifier** B local C abstraction D all
- 48 Which of the following statement of a program is not right?
A class t{ }; t s[5]; B class t{ }s; C **class t{ }s[];** D none
- 49 The combination of abstraction of the data and code is viewed in_____.
A inheritance B **object** Cclass D encapsulation
- 50 C is which type of language
A **High level** B procedural C OOP D Pure OOP
- 51 An object can have
A characteristics B behavior C **both** D none
- 52 In OOPS the program is divided into____
A class B **Object** C data D All
- 53 POP follows
A **Top down approach** B Bottom up C both D None
- 54 OOPs follows
A Top down approach B **Bottom up** C both D None
- 55 collection of objects of similar type is called____
A **class** B function C pointer D all
- 56 _____ is a general structure or blue print or template for objects.
A **Class** B function C object D none
- 57 The binding of data and functions into a single unit is known as
A Abstraction B **Encapsulation** C pointer D polymorphism
- 58 creation of new classes from the existing classes is known as
A **Inheritance** B polymorphism C object D all
- 59 Insulation of data from direct access by the program is called
A **Data Hiding** B Message passing C both D none
- 60 Hiding individual components of an entity is called :
A polymorphism B **encapsulation** C scaling D None

Which of the following concepts means one name, many forms?

A **polymorphism** B encapsulation C abstraction D None

UNIT 2

- 1 Who was the developer of C++
A **B stroustrup** B Dennis Ritchie C alan kay D None
- 2 In which year C++ introduced
A 1987 B **1980** C 1972 D none
- 3 The idea of C++ comes from
A **C Increment op** B Addition op C assignment op D none
- 4 C++ is a ____ of C language
A Extension B Superset C **both** D none
- 5 C++ follows the approach of
A **Bottom up** B top down C both D none
- 5 C++ statement terminates with
A **semi colon** B colon C comma D none
- 6 In C++ single line comments can be write using
A **//** B # C **//** D all
- 7 In C++ multi line comments can be write using
A **/* */** B ?? C **//** D #
- 8 Which header file is used for read and write data in C++
A stdio.h B **iostream.h** C process.h D all
- 9 # symbol shows:
A **Preprocessor dir.** B header file C constant D all
- 10 Which header file is used for formatting of stream of data
A **iomani.h** B iostream C stdio.h D all
- 11 An array element is accessed using:
a. Dot operator b) Scope resolution operator c). **An index number** d) None
12. A structure is a group of:
a. **Items of different data types** b Same data type items c. Integers d) None
13. Relational operators have a higher precedence than arithmetic operators
a. True b) **False** c) equal precedence
14. The symbol << is :
a. Extraction operator b) **Insertion operator** c. both d) none
15. the function abs() is declared in :
a. **<math.h>** b) <stdlib.h> c) <stdio.h> d)<iostream.h>
16. Which of the following is a logical OR operator:
a. && b) **||** c) ?: d)&=
17. The for loop is best if we know:
a. **Fixed no. of repetition** b) Condition
c) Value of calculation d) No. of repetition is not fixed

39. >> is:
 a. insertion operator b) **extraction operator** c) both d) none
40. cout is a/an _____ .
 a. operator b. function c. **object** d. macro
41. Which of the following header file includes definition of cin and cout?
 a. istream.h b. ostream.h c. iomanip.h d. **iostream.h**
42. Which of the following header file includes definition of cin?
 a. **istream.h** b. ostream.h c. iomanip.h d. iostream.h
43. Which of the following header file includes definition of cout?
 a. istream.h b. **ostream.h** c. iomanip.h d. **iostream.h**
44. Which of the following header file includes definition of endl?
 a. istream.h b. ostream.h c. **ios manip.h** d. iostream.h
45. Which of the following header file is used of setw()
 a. istream.h b. ostream.h c. **ios manip.h** d. iostream.h
46. What does a reference provide?
 a Alternate name for the class b **Alternate name for the variable**
 c Alternate name for the pointer d none of these
47. What does the cerr represent?
 a **Standard error stream** b Standard logging stream
 c Input stream d Output stream
48. What is the return type of the conversion operator?
 (a) void (b) int (c) float **(d) no return type**
49. Which mechanism is used to implement concept of generic programming in c++?
 a virtual function **(b) template** (c) friend function (d) inline function
50. The standard output stream is:
 a. cin b) stin **c) cout** d) stout
51. What features make C++ so powerful?
 a Easy implementation b Code reusability c Easy me. Mngt d **All**
52. Out of the following, which cannot be used as an identifier in C++?
 a. Name2 b. _Total c. **class** d. Derived
53. A condition that is caused by runtime error in a computer program is known as
 a **exception** b. Syntax error c. Semantic error d. none
54. The major goal of object oriented programming is :
 a. top down program development b.speed c. User-interface d. **Reuse**
55. Which of the following is not an object oriented programming language?
 (a) C++ (b) Java **(c) C** (d) Smalltalk
56. Which one of the following is not a fundamental data type in C++
 (a) float **(b) string** (c) int (d) None
57. Which one of the following is not a valid reserved keyword in C++
 a. Else b) Public c) **is** d) Private
58. Each pass through a loop is called a/an
 a) Enumeration b) **iteration** c) culmination d) pass through
59. Which of the following languages is a subset of C++ language?
 a) **C language** b) java c) C# d) small talk
60. The statement i++; is equivalent to
 a) i = i + i; b) **i = i + 1;** c) i=i-1; d) i--;
61. ++ is a operator:
 (a) addition **(b) increment** (c) assignment (d) none

62. Which is a keyword
 (a) Float (**b**) float (c) Int (d) Integer
63. First letter of identifier should be letter or _
 (**a**) True (b) false
64. For loop is a
 (a) conditional (**b**) iterative (c) sequence (d) branching
65. Overloading and overriding means:
 a. Same b) Different c) **Can be both** d) None
66. Example of memory management operator is
 (a) new (b) delete (c) both (d) none
67. While(1) is a infinite loop
 A No **B Yes**
68. Which loop must be terminated by semi colon.
 A **Do while()** B for C if D all
69. For(; ;), what is the output:
 A error **B infinite loop** C not run D none
70. For(a=0;a<20;), what is the result
 A **infinite loop** B not run C logical error D all
71. In an array x[10], the x represents the:
 A **base address** B name C variable D none
72. Int x[5]=(2,3,8,9,5); the base address is 1000 then the location of element 3 is:
 A 1004 **B 1002** C 1003 D 1001
73. array elements of 2D are stored at ____.
 A **subsequent memory location** B randomly C both D none
74. Which data type stores multiple values of the same data type.
 A pointer **B Array** C structure D union
75. Int A[]; is it correct.
 A **No** B Yes
76. Int a[]={2,6,5}, it is correct.
 A **Yes** B No
77. When the size of array is exceed, the compiler will give the error.
 A Yes **B No**
78. Array are passed as argument to a function by:
 A value B reference **C Both** D none
79. Which keyword is used for function not return any value:
 A **void** B int C auto D none
80. A function is called itself is known as:
 A main() B Recursion C nested D none
81. Function not returning any value is called:
 A **void** B int C return D none
82. How many values can be return by return statement:
 A 2 **B 1** C any D none
83. A user define fun can call another user define function.
 A **yes** B No
84. Which element of function gives the information in advance to compiler?
 A Definition B calling **C Prototype** D none
85. The argument of a function which are invoked in function definition is called:
 A **formal** B actual C local D none

86. Which is the correct syntax of function prototype
 A void a() B **void a(int);** C void a(s); D none
87. Which is the correct syntax of function definition
 A **void a(int x){}** B void a(int);{ } C void a(s);{ } D none
88. Which is the correct syntax of function calling
 A void a(); B a(int); C **a(s);** D none
89. Where the data type is not compulsory in passing argument
 A prototype B definition C **calling** D none

UNIT 3

1. Fast access of array elements can be done by using:
 A stack B **pointer** C address D all
2. In a class you can have more than one constructor with the same name.
 a. **True** b) False
3. Constructor in a class:
 a. Has same name as class b) Is a public member function
 c. Can be overloaded d) **All of the above**
4. Constructor has same name as:
 a. Object b) Program c) **Class** d)None of these
5. The return type of a destructor is:
 a) The class b) Void c)Integer d) **None**
6. A constructor can be defined:
 a. Only inside class definition b) Only outside class definition
 c. **Both outside and inside** d) In main()
7. Which of the following is not a type of constructor?
 i. Copy constructor
 ii. **Friend constructor**
 iii. Default constructor
 iv. Parameterized constructor
8. Which of the following ways are legal to access a class data member using this pointer?
 i. **this->x**
 ii. this.x
 iii. *this.x
 iv. *this-x
9. Which of the following statements regarding inline functions is correct?
 i. **It speeds up execution.**
 ii. It slows down execution.
 iii. It increases the code size.
 iv. Both A and C.
10. What does a reference provide?
 (a) Alternate name for the class (b) **Alternate name for the variable**
 (c) Alternate name for the pointer (d) none of these
11. Which of the following statements is False?
 (a) Constructors do not return any values
 (b) **A class should have at least one constructor**
 (c) Destructor never take any argument
 (d) A constructor that accepts no argument is known as the default constructor
12. Which of the following is a correct syntax of a destructor for the class XYZ?

- (a) XYZ(); (b) #XYZ(); (c) %XYZ(); (d) ~XYZ();
13. A constructor that accepts _____ parameters is called the default constructor.
 (a) one (b) two (c) three (d) **zero**
14. Which of the following is not a type of constructor?
 (a) Copy constructor (b) default constructor
 (c) **friend constructor** (d) parameterized constructor
15. Which of the following is a valid destructor of the class name "Country"
 a) int ~Country() b) void Country() c) int ~Country(Country obj) **d) ~Country()**
16. How do we define a constructor?
a. x() {} b. x() {}~ c. x() ~{} d. ~x() {}
17. Array of object can be write as
 (a) **obj[n]** (b) obj (c) obj(n) (d) none
18. Can we create multiple object of a single class
 (a) **True** (b) false
19. Which of the following is not correct for virtual function in C++ ?
A. Virtual function can be static.
 B. Virtual function should be accessed using pointers
 C. Virtual function is defined in base class
 D. Must be declared in public section of class
20. How can we make a class abstract?
 A. By declaring it abstract using the static keyword
 B. By declaring it abstract using the virtual keyword.
C. By making at least one member function as pure virtual function
 D. By making all member functions constant
21. Which of these following members are not accessed by using direct member access operator?
 A. Public B. Private C. Protected **D. Both B & C**
22. Which other keywords are also used to declare the class other than class?
 A. Struct B. Union C. Object **D. Both struct & union**
23. Which of the following is true?
 A. All objects of a class share all data members of class
B. Objects of a class do not share non-static members. Every object has its own copy
 C. Objects of a class do not share codes of non-static methods, they have their own copy
 D. None of these
24. Constructor is executed when _____.
 A. An object goes out of scope.
 B. A class is declared
C. An object is created
 D. An object is used
25. How many ways of reusing are there in class hierarchy?
 A. 1 B. 3 C. 4 **D. 2** code sharing and interface sharing.
26. Where does the object is created?
 A. Class B. Constructor C. Destructors D. Attributes
27. 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; };
28. Which of the following keywords is used to control access to a class member?

- A. Default
 - B. Break
 - C. Protected**
 - D. Asm
29. Which of the following statements is incorrect?
- A. Destructor of base class should always be static**
 - B. Destructor of base class should always be virtual.
 - C. Destructor of base class should not be virtual.
 - D. Destructor of base class should always be private.
30. What is the size of empty class?
- A. 0
 - B. 2
 - C. 4
 - D. 1**
31. How to access the object in the class?
- A. Ternary operator
 - B. Scope resolution operator
 - C. Direct member access operator**
 - D. None of the above
32. 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. None of the mentioned
33. Which of the following is not a member of class?
- A. Static Function.
 - B. Friend Function**
 - C. Const Function
 - D. Virtual Function
34. Which of the followings is/are automatically added to every class, if we do not write our own.
- A. Copy Constructor.
 - B. Assignment Operator
 - C. A constructor without any parameter
 - D. All of the above**
35. Which of the following gets called when an object is being created?
- A. Constructor**
 - B. Virtual Function
 - C. Destructors
 - D. Main
36. Destructor has a same name as the constructor and it is preceded by?
- A. !
 - B. ?
 - C. ~**
 - D. \$
37. Generic pointers can be declared with_____.
- A. auto
 - B. void**
 - C. asm
 - D. None of the above
38. What is size of generic pointer in c?
- A. 0
 - B. 1
 - C. 2**
 - D. Null
39. A void pointer cannot point to which of these?
- A. Methods in c++
 - B. Class member in c++**
 - C. Both A & B
 - D. None of the above
40. Referencing a value through a pointer is called
- A. Direct calling
 - B. Indirection**
 - C. Pointer referencing
 - D. All of the above

41. Which constructor function is designed to copy object of same class type?
A. Copy constructor B. Create constructor
 C. Object constructor D. Dynamic constructor
42. Like constructors, can there be more than one destructors in a class?
 A. Yes **B. No** C. May Be D. Can't Say
43. Which of the following is true about constructors.
 A. They cannot be virtual B. They are automatically called by new operator.
C. both D. none
44. Values of copy constructor are passed:
 a. **By reference** b) By copy c) By pointer d) By assignment
45. Inline functions are invoked at the time of
a) Run time b)Compile time c)Depends on how it is invoked d)Both b and c above
46. Which of the following statement would call a copy constructor?
 (Consider ABC is a class and A1 and A2 are objects of class ABC)
 (a)ABC A1 (b) ABC A2=A1 (c) ABC A1(A2) **(d) both (b) and (c)**
47. What happens to a function defined inside a class without any complex operations (like looping, a large number of lines, etc)?
 a) It becomes a virtual function of the class
 b) It becomes a default calling function of the class
c) It becomes an inline function of the class
 d) The program gives an error
48. What is an inline function?
a) A function that is expanded at each call during execution
 b) A function that is called during compile time
 c) A function that is not checked for syntax errors
 d) A function that is not checked for semantic analysis
49. An inline function is expanded during _____
a) compile-time b) run-time c) never expanded d) end of the program
50. In which of the following cases inline functions may not work?
 a) If the function has static variables.
 b) If the function contains loops
 c) If the function is recursive
d) All
51. When we define the default values for a function?
 a) When a function is defined
b) When a function is declared
 c) When the scope of the function is over
 d) When a function is called
52. If an argument from the parameter list of a function is defined constant then _____
 a) It can be modified inside the function
b) It cannot be modified inside the function
 c) Error occurs
 d) Segmentation fault

53. Name the function whose definition can be substituted at a place where its function call is made _____
a) friends function **b) inline function** c) volatile function d) none
54. Where should default parameters appear in a function prototype?
a) To the rightmost side of the parameter list
b) To the leftmost side of the parameter list
c) Anywhere inside the parameter list
d) Middle of the parameter list
55. A friend class can access _____ members of other class in which it is declared as friend.
A. Private B. Protected C. Public **D. Both A and B**
56. A friend function can be
A. A method of another class B. A global function
C. Both A and B D. None of the above
57. If class A is a friend of B, then B doesn't become a friend of A automatically.
A. TRUE B. FALSE C. Can be true and false D. Can not say
58. Which of the following is false?
A. Friendship is not inherited
B. The concept of friends is there in Java.
C. Both A and B
D. None of the above
59. Which keyword is used to represent a friend function?
A. Friend **B. friend** C. friend_func D. Friend_func
60. 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 above
61. Where does keyword 'friend' should be placed?
A. function declaration B. function definition
C. main function D. block function
62. What is the syntax of friend function?
a) friend class1 Class2; b) friend class; c) friend class d) None
63. What is an array of objects?
a) An array of instances of class represented by single name
b) An array of instances of class represented by more than one name
c) An array of instances which have more than 2 instances
d) An array of instances which have different types
64. Which among the following is a mandatory condition for array of objects?
a) All the objects should be of different class
b) All the objects should be of same program classes
c) All the objects should be of same class
d) All the objects should have different data
65. What is the type of elements of array of objects?
a) Class b) Void c) String d) Null
66. When are the array of objects without any initialization useful?
a) When object data is not required just after the declaration
b) When initialization of object data is to be made by the compiler

- c) When object data doesn't matter in the program
d) When the object should contain garbage data
67. How the objects of array can be denoted?
a) **Indices** b) Name c) Random numbers d) Alphabets
68. The objects in an object array _____
a) Can be created without use of constructor
b) **Can be created without calling default constructor**
c) Can't be created with use of constructor
d) Can't be created without calling default constructor
69. The Object array is created in _____
a) **Heap memory**
b) Stack memory
c) HDD
d) ROM
70. Can we have two dimensional object array?
a) **Yes, always**
b) Yes, only if primitive type array
c) No, since two indices are impossible
d) No, never
71. From which index does the array of objects start?
a) **0** b) 1 c) 2 d) 3
72. Two dimensional array can't be initialized with the declaration.
a) True
b) **False**
73. Is an array of characters always a string?
a) Yes, always
b) Yes, if each character is terminated by null
c) No, since each character is terminated by null
d) **No, never**
74. In how many ways can an object be passed to a function?
a) 1
b) 2
c) **3**
d) 4
75. If an object is passed by value _____
a) **A new copy of object is created implicitly**
b) The object itself is used
c) Address of the object is passed
d) A new object is created with new random values
76. Pass by address passes the address of object _____ and pass by reference passes the address of the object _____
a) Explicitly, explicitly
b) Implicitly, implicitly
c) **Explicitly, Implicitly**
d) Implicitly, explicitly
77. If an object is passed by reference, the changes made in the function _____
a) **Are reflected to the main object of caller function too**
b) Are reflected only in local scope of the called function

- c) Are reflected to the copy of the object that is made during pass
 - d) Are reflected to caller function object and called function object also
78. Constructor function is not called when an object is passed to a function, will its destructor be called when its copy is destroyed?
- a) Yes, depending on code
 - b) Yes, must be called**
 - c) No, since no constructor was called
 - d) No, since same object gets used
79. When an object is returned by a function, a _____ is automatically created to hold the return value.
- a) Temporary object**
 - b) Virtual object
 - c) New object
 - d) Data member
80. How many objects can be returned at once?
- a) Only 1**
 - b) Only 2
 - c) Only 16
 - d) As many as required
81. How many objects can be passed to a function simultaneously?
- a) Only 1
 - b) Only an array
 - c) Only 1 or an array
 - d) As many as required**
82. Size of a class is _____
- a) Sum of the size of all the variables declared inside the class
 - b) Sum of the size of all the variables along with inherited variables in the class
 - c) Size of the largest size of variable
 - d) Classes doesn't have any size**
83. Which class can have member functions without their implementation?
- a) Default class
 - b) String class
 - c) Template class
 - d) Abstract class**
84. Which syntax for class definition is wrong?
- a) `class student{ };`
 - b) `student class{ };`**
 - c) `class student{ public: student(int a){ } };`
 - d) `class student{ student(int a){ } };`
85. Instance of which type of class can't be created?
- a) Anonymous class
 - b) Nested class
 - c) Parent class
 - d) Abstract class**

Unit 4

1. Which is not a visibility specifier?

- a. Public b) **Default** c) Private d) Protected
2. **A class hierarchy describes:**
a. "is a" relationship b) "has a" relationship c) organization chart d) family tree
3. **Which is not a type of inheritance?**
a. Hybrid b) Multiple c) Multilevel d) **Multiclass**
4. **Subclass is same as:**
a. **Derived class** b) Super class c) Base class d) None of these
5. **Which operator can not be overloaded?**
a. * b) + c) -> d) **::**
6. **A pointer to a base class can point to objects of a derived class.**
a. True b) **False**
7. **Which of the following may be overloaded?**
a. :: b) .* c) ?: d) **%**
8. **In function overloading selection of the correct choice is left to the:**
a. **Compiler** b) Programmer c) Main() d) Member functions
9. **Which of the following in C++ is inherited in derived class from a base class?**
a. Constructor (b) Destructor (c) **Data Members** (d) Virtual methods
10. **Constructor can be a virtual function**
(a) True (b) **False**
11. **When the inheritance is private, the private methods of the base class are_____in the derived class**
(a) **Inaccessible** (b) accessible (c) protected (d) Public
12. **An abstract class is a class that:**
a. Defines a pure virtual function b) **Cannot declare an object**
C. Can declare pointers d) Can create an object
13. **Pointers of different types may not be assigned to one another without a cast operator**
a. **True** b) False
14. **How many types of polymorphisms are supported by C++?**
a) 1 b) **2** c) 3 d) 0
15. **Which of the following is correct about function overloading?**
A. The types of arguments are different.
B. The order of argument is different.
C. The number of arguments are different.
D. **ALL of these**
16. **Which inheritance type is used in the class given below?**
class A : public X, public Y
A. Multilevel inheritance B. **Multiple inheritance**
C. Hybrid inheritance D. Hierarchical Inheritance
17. **Which of the following is a mechanism of static polymorphism?**
A. Operator overloading B. Function overloading
C. Templates D. **All of the above**
18. **Which of the following keyword is used to overload an operator?**
A. overload
B. **operator**
C. friend
D. override
19. **Which of the following advantages we lose by using multiple inheritance?**
(a) Dynamic binding (b) Polymorphism
(c) **Both a & b** (d) None of these

20. Giving an special meaning to an operator is known as:
 a) function b) **operator overloading** c) object d) none
21. Operator overloading is an example of
 a) **compile polymorphism** b) run time c) dynamic d) star
22. Right syntax of inheritance is:
 a) **class subclass:VM superclass** b) class super: VM sub
 c) class super:: VM sub d) all
23. One base class and one child class shows:
 a) multiple b) **single** c) multilevel d) none
24. One base class and multiple child class shows:
 a) **hierarchical** b) single c) multilevel d) none
25. A derived class is a base class for other derived class is called
 a) multiple b) single c) **multilevel** d) none
26. Multiple base class and one child class shows:
 a) **multiple** b) single c) multilevel d) none
27. Public member of super class will inherited publically then their visibility in sub class as a
 a) **Public** b) protected c) Private d) none
28. private member of super class will inherited publically then their visibility in sub class as
 a
 a) Public b) protected c) Private d) **not inherited**
29. protected member of super class will inherited publically then their visibility in sub class
 as a
 a) Public b) **protected** c) Private d) none
30. Public member of super class will inherited privately then their visibility in sub class as a
 a) Public b) protected c) **Private** d) none
31. private member of super class will inherited privately then their visibility in sub class as a
 a) Public b) protected c) Private d) **not inherited**
32. protected member of super class will inherited privately then their visibility in sub class as
 a
 a) Public b) protected c) **Private** d) not inherited
33. private member of super class will inherited protected then their visibility in sub class as a
 a) Public b) protected c) Private d) **not inherited**
34. public member of super class will inherited protected then their visibility in sub class as a
 a) Public b) **protected** c) Private d) not inherited
35. protected member of super class will inherited protected then their visibility in sub class
 as a
 a) Public b) **protected** c) Private d) not inherited
36. The solution of multiple inheritance is:
 a) **virtual base class** b) friend c) Private d) not inherited
37. Which class is not used to create objects?
 a) base b) **abstract** c) virtual d) all
38. What is meant by multiple inheritance?
 a) Deriving a base class from derived class
 b) Deriving a derived class from base class
 c) **Deriving a derived class from more than one base class**
 d) Deriving a derived base class
39. Do nothing function is also called
 a) virtual fun b) **pure virtual function** c) abstract d) all
40. Virtual void display()=0; shows

- a) virtual fun b) **pure virtual function** c) abstract d) all
41. **A function declared in base class which has no definition relative to the base class is called**
 a) virtual fun b) **pure virtual function** c) abstract d) all
42. **Virtual function is an example of**
43. a) dynamic type b) **dynamic binding** c) static binding d) all
44. **we can create a virtual destructor**
 a. **True** b) False
45. **we can create a virtual constructor**
 a. True **b) False**
46. **A class containing pure virtual function is called**
 a) virtual fun b) **abstract class** c) both d) none
47. **Function overloading means fun name same but ___ is different**
 a) arg type b) number of arg c) **both** d) none
48. **The main advantage of inheritance is reusability**
 a. **True** b) False
49. **In multiple inheritance visibility mode is separated by**
 a) **comma** b): c) :: d) none
50. **Which operator can not be overloaded?**
 a) class mem. access op.(.,*) b) :: c) sizeof d) ?: **e) ALL**
51. **The feature in object-oriented programming that allows the same operation to be carried out differently, depending on the object, is _____**
 A. inheritance
 B. **polymorphism**
 C. overfunctioning
 D. overriding
52. **Which of the following concepts is used to implement late binding?**
 a. **Virtual function** b. Operator function c. Const function d. Static function
54. **The C++ operator used to deallocate memory is:**
 a. New b) **Delete** c) Mem d) None
55. **If a class c is derived from class B, which is derived from class A, all through public inheritance, then a class c member function can access**
 a) Only protected and public data of C and B
 b) Only protected and public data of C
 c) All data of C and private data of A and B
 d) **Public and protected data of A and B and All data of C**
56. **If a class will serve as a base class, most often the base class data members are :**
 a. private b. protected c. **public** d. polymorphic
57. **Inheritance is the principle that**
 a) classes with the same name must be derived from one another
 b) **Knowledge of a general category can be applied to more specific objects**
 c) C++ functions may be used only if they have logical predecessors
 d) One function name may invoke different methods
58. **Which of the following is not a type of inheritance in C++?**
 a) **parallel inheritance**
 b) single level inheritance
 c) Multi level inheritance
 d) Multiple inheritance

- 59. The following is the correct interpretation of hierarchical inheritance**
- one base class with one derived class
 - more than one generations of classes
 - one base class with more than one derived classes**
 - more than one base classes with one derived class.
- 60. Which one of the following most accurately describes “multiple inheritance” ?**
- When a child class has both an “is a “ and a “has a “ relationship with its parent
 - When two classes inherit from each other
 - (c) When a base class has two or more derived classes
 - (d) When a child class has two or more parent classes**
- 61. We can make a class abstract by**
- (a) Declaring it abstract using the virtual keyword
 - (b) Making at least one member function as virtual function
 - (c) Making at least one member function as pure virtual function**
 - (d) Making all member function const.
- 62. Which keyword is used for operator overloading:**
- op
 - operator**
 - inline
 - none
- 63. Which symbol is used to create multiple inheritances?**
- Dot
 - Comma**
 - Dollar
 - star

Unit 5

- Any exception specification appears in:**
 - main()
 - A catch block**
 - A try block
 - Header of the function that throws the exception
- Which of the following problem causes an exception?**
 - Missing semicolon in statement in main().
 - A problem in calling function.
 - A syntax error.
 - A run-time error.**
- Which key word is used to check exception in the block of code?**
 - catch
 - throw
 - try**
 - none of these
- By default, data members in a structure are**
 - private
 - public**
 - protected
 - either a or b
- Which one of the following is correct about the statements given below?**

All function calls are resolved at compile time in C language
All function calls are resolved at compile time in C++

 - Only II is correct
 - Both I and II are correct**
 - Only I is correct
 - Both I and II are incorrect
- Class B is derived from base class A through public inheritance. Also class C is derived from class B through protected inheritance. Then a class C member function can access**
 - Only the protected and public data of class B, none of class A**

- (B) **Protected and public data of class A and B**
 (C) Public data of class A and private data of class B
 (D) Private data of both classes A and B
7. **The operator used to access member function of a class from its object is**
 (a) * (b) :: (c) : (d) .
8. Which header file is required to use file I/O operations?
 a) <ifstream> b) <ostream> **c) <fstream>** d) <iostream>
10. Which stream class is to only write on files?
a) ofstream b) ifstream c) iostream d) fstream
11. Which of the following is used to create an output stream?
a) ofstream b) ifstream c) iostream d) fstream
12. 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**
13. Which of the following is not used as a file opening mode?
a) ios::trunc b) ios::binary c) ios::in d) ios::ate
14. By default, all the files in C++ are opened in _____ mode.
 a) **Text** b) Binary c) ISCII d) VTC
15. 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**
16. 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
17. What is the return type open() method?
 a) int b) char **c) bool** d) float
18. Which of the following is not used to seek file pointer?
a) ios::set b) ios::end c) ios::cur d) ios::beg
19. 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::trunc
20. 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::trunc
21. 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()
22. Which function is used to reposition the file pointer?
 a) moveg() **b) seekg()** c) changep() d) go_p()
23. 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
24. Which of these is the correct statement about eof() ?
 a) Returns true if a file open for reading has reached the next character.
 b) Returns true if a file open for reading has reached the next word.
c) Returns true if a file open for reading has reached the end.
 d) Returns true if a file open for reading has reached the middle.

25. Which of the following true about FILE *fp
- FILE is a structure and fp is a pointer to the structure of FILE type**
 - FILE is a buffered stream
 - FILE is a keyword in C for representing files and fp is a variable of FILE type
 - FILE is a stream
26. Which of the following methods can be used to open a file in file handling?
- Using Open ()
 - Constructor method
 - Destructor method
 - Both A and B**
27. Which operator is used to insert the data into file?
- >>
 - <<**
 - <
 - None of the above
28. Which is correct syntax?
- myfile:open ("example.bin", ios::out);
 - myfile.open ("example.bin", ios::out);**
 - myfile::open ("example.bin", ios::out);
 - myfile.open ("example.bin", ios:out);
29. Which member function is used to determine whether the stream object is currently associated with a file?
- is_open**
 - Buf
 - String
 - None of the above
30. getc() returns EOF when
- End of files is reached
 - When getc() fails to read a character
 - Both A & B**
 - None of the above
31. When fopen() is not able to open a file, it returns
- EOF
 - Null**
 - Runtime error
 - Compiler dependent
32. How many objects are used for input and output to a string?
- 1
 - 2
 - 3 stringstream, ostream, and istream**
 - 4
33. Which function is used to position back from the end of file object?
- Seekg**
 - Seekp
 - Both seekg & seekp
 - None of the above
34. If we have object from ofstream class, then default mode of opening the file is _____
- ios::in
 - ios::out
 - ios::in|ios::trunk
 - ios::out|ios::trunk**
35. Which is correct syntax for, position n bytes back from end of fileObject ?
- FileObject.seekg(ios::end, n);
 - FileObject.seekg(n, ios:end);
 - FileObject.seekg(n, ios::end);**
 - FileObject.seekg(ios:end, n);
36. Which stream class is to only read from files ?
- <ifstream>**
 - <ostream>
 - <fstream>
 - <iostream>
37. Which among following is used to open a file in binary mode ?
- ios::in
 - ios::out
 - ios::app
 - ios::binary**
38. Which functions allow to change the location of the get and put positions ?
- sg() and sp()
 - sekg() and sekp()
 - gog() and gop()
 - seekg() and seekp()**
39. offset counted from the current position using ?
- ios::curr
 - ios::cr
 - ios::cur**
 - ios::current
40. eof() is used to get
- easy code review
 - end of file**
 - debug report
 - file close
41. Which of the following is not used to seek a file pointer?
- ios::cur
 - ios::beg
 - ios::end
 - ios::set**

42. Which value is placed in the base class?
 A. Derived values **B. Default type values** C. Both D. None
43. 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. None of the above
44. Which of the following best defines the syntax for template function ?
 A. template return_type Function_Name(Parameters)
 B. template return_type Function_Name(Parameters)
 C. **Both A and B** D. None of the above
45. Templates are abstract recipe for producing a concrete code, and it is used for
 A. Producing functions B. Producing classes
 C. Nothing **D. Both A and B**
46. How many parameters are legal for non-type template?
 A. 1 B. 2 C. 3 **D. 4**
 Hint: integral or enumeration type, Pointer to object or pointer to function, Reference to object or reference to function, Pointer to member.
47. How many kinds of entities are directly parameterized in c++?
 A. 1 B. 2 **C. 3** D. 4
 types, constants, and templates
48. From where does the template class derived?
 A. Regular non-templated C++ class B. Templated class
 C. **Both A or B** D. None of the above
49. Can we have overloading of the function templates?
 A. **Yes** B. No C. May Be D. Can't Say
50. A container class is a class whose instances are
 A. **Containers** B. Functions C. Strings D. None of the above
51. Which of the things does not require instantiation?
 A. Functions B. Non virtual member function C. Member class **D. All**
52. What can be passed by non-type template parameters during compile time?
 A. Int B. Float **C. Constant expression** D. None of the above
53. What is other name of full specialization?
 A. **Explicit specialization** B. Implicit specialization
 C. Function overloading template D. None of the above
54. A common activity performed on a container is called
 A. Functioning B. Iterator **C. Traversal** D. All of them
55. How many types of templates are there in c++?
 A. 1 **B. 2** function template and class template C. 3 D. 4
56. Which is dependent on template parameter?
 A. **Base class** B. Abstract class C. Method D. None
57. 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. None of the above
58. Containers have the same types, that's why they are called
 A. Heterogeneous **B. Homogeneous** C. Vectors D. None of them
59. Which keyword is used to handle the exception?
 A. Try B. Throw **C. Catch** D. None of the above
60. Which is used to throw a exception?
 A. Try **B. Throw** C. Catch D. None of the above
61. Which exception is thrown by dynamic_cast?
A. bad_cast B. bad_typeid C. bad_exception D. bad_alloc
62. How do define the user-defined exceptions?
A. Inheriting & overriding exception class functionality
 B. Overriding class functionality
 C. Inheriting class functionality
 D. None of the above
63. We can prevent a function from throwing any exceptions.
A. TRUE B. FALSE C. May Be D. Can't Say
64. In nested try block, if inner catch handler gets executed, then _____?
 A. Program execution stops immediately.
 B. Outer catch handler will also get executed.
 C. Compiler will jump to the outer catch handler and then executes remaining executable statements of main().
D. Compiler will execute remaining executable statements of outer try block and then the main().
65. Return type of uncaught_exception() is _____.
 A. int **B. bool** C. char * D. double
66. If inner catch handler is not able to handle the exception then _____ .
 A. Compiler will look for outer try handler
 B. Program terminates abnormally
C. Compiler will check for appropriate catch handler of outer try block
 D. None of the above
67. Which type of program is recommended to include in try block?
 A. Static memory allocation **B. Dynamic memory allocation**
 C. Const reference D. Pointer
68. Which illustrate predefined exceptions?
 A. Memory allocation error B. I/O error
C. Both A and B D. None of the above
69. What is not called terminate() function in an constructor?

- A. Main B. Class **C. Destructor** D. None of the above
70. Which statement is used to catch all types of exceptions?
 A. Catch() B. Catch(Test t) **C. Catch(...)** D. None of the above
71. How to handle error in the destructor?
 A. Throwing **B. Terminate()** C. Both throwing & terminate D. None
72. What kind of exceptions are available in c++?
 A. Handled **B. Unhandled** C. Static D. Dynamic
74. What is the basic of grouping standard exception classes,in c++?
 A. Catch B. None of these C. Error **D. Namespace std**
75. What is a count of standard exception?
A. 9 B. 5 C. 6 D. 7
76. What should be included in try block in c++ programming language?
 A. Static value **B. Dynamic allocation** C. None of the above D. Const value
77. How many standard exception exist in c++?
 A. 9 **B. 5** C. 6 D. 7
78. Catch-all handlers uses which operators in c++?
 A. String operators B. Ternary operators **C. Ellipses operators** D. Unary operators
79. Uncaught exception will call which function?
A. Terminate B. Catch C. None of the above D. Throw
80. How to handle exception in constructor, in c++?
 A. We have to return an exception **B. We have to throw an exception**
 C. Both A and B D. None of the above
81. How many parameters do the throw expression has, in c++?
A. 1 B. 2 C. 3 D. 4
82. Which is used to handle the exceptions in c++?
 A. catch handler B. handler **C. exception handler** D. throw
83. Exception handler are declared with____keyword
 A. try **B. Catch** C. throw D. Finally