

OBJECT ORIENTED PROGRAMMING WITH C++-16UEC308

K1 LEVEL

UNIT I

1. What is meant by "Object"?
 - a) **Basic runtime entities**
 - b) Basic compile time entities
 - c) None of these
 - d) Basic entities
2. Which year C++ introduced-----
 - a) 1981
 - b) 1985
 - c) 1982
 - d) 1986
3. ANSI Stands for
 - a) **American National Standards Institute**
 - b) American National Standards Information
 - c) Asian Standards National Interchange
 - d) American National Standards Interchange
4. The Wrapping up of data and functions into a single unit is called-----
 - a) **Data Encapsulation**
 - b) Data Abstraction
 - c) Abstract Data
 - d) Polymorphism
5. Dynamic Binding is also known as
 - a) **Static Binding**
 - b) Runtime Binding
 - c) Compile time Binding
 - d) Dynamic Binding
6. Polymorphism means
 - a) **Ability to take more than one form**
 - b) Ability to take one form
 - c) Ability to take more than two forms
 - d) Ability to take more than three forms
7. OOP language supports object based features, inheritance and _____.
 - a) Encapsulation
 - b) **Polymorphism**
 - c) Object identity
 - d) Functions
8. _____ is the fundamental building block of object oriented programming language.
 - a) Module
 - b) Code
 - c) **Object**
 - d) Function
9. A _____ is an instance of class.
 - a) code
 - b) **object**
 - c) variable
 - d) pointer
10. _____ is a relationship between classes.
 - a) Polymorphism
 - b) **Inheritance**
 - c) Overloading

d) Overriding

11. _____ is not a type of scope in c++.

- a) Global
- b) Local
- c) File
- d) Function**

12. Which of the following is the correct operator to compare two variables?

- a) :=
- b) =
- c) equal
- d) ==**

13. Variables that are declared inside a function are called as _____.

- A. local**
- B. global
- C. scope
- D. external

14. endl is declared in c++ _____

- A. end
- B. endl**
- C. \t
- D. ;

15. The name of a function variable or class is called _____.

- a) libraries
- b) stream
- c) identifiers**
- d) keywords

16. _____ is the mechanism which allows a class A to inherit properties of a class B.

- a) Data abstraction
- b) Encapsulation
- c) Inheritance**
- d) Polymorphism

17. The mechanism that binds code and data together and keeps them secure from outside world is known as _____

- a) Abstraction
- b) Encapsulation**
- c) Inheritance
- d) Polymorphism

18. Function overloading, operator overloading and virtual functions are the means for implementing _____.

- a) Abstraction
- b) Encapsulation
- c) Inheritance
- d) Polymorphism**

19. A structure defines a _____ type.

- a) **class**
- b) pointers
- c) arrays
- d) variables

20 The _____ access specifier allows functions or data to be accessible to other parts of the program.

- a) private
- b) protected
- c) **public**
- d) inherited

UNIT II

1. C++ begins its execution with _____.

- a) header file
- b) **main**
- c) class
- d) declaration

2. Public, private, protected are _____.

- a) identifiers
- b) data members
- c) **access specifiers**
- d) type of class

3. _____ operator links a class to a member.

- a) **::**
- b) .
- c) ->
- d) *

4. A continue statement causes execution to skip to _____.

- a) the first statement after the loop
- b) the statement following the continue statement
- c) the return 0; statement
- d) **the next iteration of the loop**

5. In a group of nested loops, which loop is executed the most number of times?

- a) The outermost loop
- b) **The innermost loop**
- c) All loops are executed the same number of times
- d) Cannot be determined without knowing the size of the loops bottom of form

6. Array indexing always starts with _____.

- a) **0**
- b) 1
- c) 2
- d) \0

7. Which is the correct keyword for string?

- a) stnr
- b) srtv
- c) **str**
- d) stn

8. When a data type must contain decimal numbers, assign the _____ type.
- a) int
 - b) char
 - c) double**
 - d) long int
9. _____ are the variables that contain the address of other variables.
- a) Function
 - b) String
 - c) Pointer**
 - d) Identifier
10. _____ operator returns the address of the identifier.
- a) &.**
 - b) *.
 - c) &&.
 - d) !.
11. The _____ operator is used to return the value of the variable to which the pointer points.
- a) reference
 - b) dereference**
 - c) dot
 - d) arrow
12. main() is a _____ function.
- a) built in
 - b) user defined**
 - c) constant
 - d) derived
13. _____ is a stream connected to standard output.
- a) cin
 - b) gets
 - c) out
 - d) cout**
14. Which of the following is not an arithmetic operator?
- a) +
 - b) *
 - c) -
 - d) &**
15. Which of the following is a logical operator?
- a) ++
 - b) ?:
 - c) ==
 - d) &&**
16. _____ is the newline character.
- a) \t
 - b) \b
 - c) \a
 - d) \n**

17. _____ is the symbol that precedes the destructor.
- a) *
 - b) ~**
 - c) &
 - d) @
18. _____ is an entry controlled looping statement.
- a) for**
 - b) repeat
 - c) until
 - d) do..while
19. Which of the following is an exit controlled looping statement?
- a) for
 - b) while
 - c) do..while**
 - d) repeat
20. Polymorphism is not implemented through _____.
- a) function overloading
 - b) operator overloading
 - c) virtual functions
 - d) constructors and destructors**

UNIT III

1. _____ is one of the way to achieve polymorphism.
- a) Inheritance
 - b) Data overloading
 - c) Operator overloading**
 - d) Message binding.
2. Looping in a program means _____.
- a) jumping to the specified branch of program
 - b) repeat the specified lines of code**
 - c) execute only once
 - d) jump to random location of the program
3. What is a Constructor?
- a) A function called when an instance of a class is initialized.**
 - b) A function that is called when an instance of a class is deleted.
 - c) A special function to change the value of dynamically allocated memory.
 - d) A function that is called in order to change the value
4. A _____ converts from an object of the type of the constructor's parameter to an object of the class.
- a) conversion function
 - b) member function
 - c) class conversion
 - d) conversion constructors**
5. Function overloading is also similar to which of the following?
- a) operator overloading
 - b) constructor overloading**

- c) destructor overloading
 - d) none of the mentioned
6. _____ function has access to all private and protected members of the class for which it is a friend.
- a) Friend**
 - b) Member
 - c) Nonmember
 - d) Void
7. _____ is the process of using the same name for two or more functions.
- a) Function overloading**
 - b) Operator overloading
 - c) Default function
 - d) Default function. Constructors
8. Which of the following correctly declares an array?
- a) int array[10];**
 - b) int array;
 - c) array {10};
 - d) array array[10];
9. What is the index number of the last element of an array with 9 elements?
- a) 9
 - b) 8**
 - c) 0
 - d) Programmer-defined
10. Which of the following accesses the seventh element stored in array?
- a) array[6];**
 - b) array[7];
 - c) array(7);
 - d) array;
11. Which of the following gives the value stored at the address pointed to by the pointer a?
- a) a
 - b) val(a)
 - c) *a**
 - d) &a
12. Which of the following is the proper keyword to deallocate memory?
- a) free**
 - b) delete
 - c) clear
 - d) remove
13. A Class can have how many destructor?
- a) 1**
 - b) 2
 - c) 3
 - d) 4
14. The parameter list in function overloading must differ by?
- a) Number of functions
 - b) Function Size

- c) Function Name
d) Number of argument
15. A _____ is a special method used to initialize the instance variable of a class.
 a) Member function
 b) Destructor
c) Constructor
 d) Structure
16. To overload an operator _____ keyword must be used along with the operator to be overloaded.
 a) Over
 b) Overload
 c) void
d) Operator
17. An _____ is a collection of elements of same data type.
 a) structure
 b) union
 c) class
d) array
18. What is the syntax of friend function?
a) friend class1 Class2;
 b) friend class;
 c) friend class
 d) classfriend
19. Which of the following is not a type of constructor?
 a) Copy constructor
b) Friend constructor
 c) Default constructor
 d) Parameterized constructor
20. Overloaded functions are _____.
 a) very long functions that can hardly run
b) two or more functions with the same name but different number of parameters or type
 c) short functions that can easily modified
 d) one function containing another one or more functions inside it

UNIT IV

1. ----- is the process by which objects of one class acquire properties of objects of another class.
 a) **Base Class** b) Derived Class c) Message Passing d) Inheritance
2. A _____ function is a function that has no body inside its base class.
 a) inline
 b) friend
 c) constructor
d) pure virtual
3. A class that is inherited is called as _____ class.
 a) derived

- b) **child**
 - c) base
 - d) abstract
4. The technique of building new classes from existing classes is called _____.
- a) **inheritance**
 - b) overloading
 - c) constructor
 - d) polymorphism
5. The class from which another class inherits the property is called _____ class.
- a) derived
 - b) sub
 - c) subordinate
 - d) **base**
6. Base class is also called as _____.
- a) derived
 - b) sub
 - c) **super**
 - d) subordinate
7. The class which derives the property from other is called as _____.
- a) super
 - b) **derived**
 - c) subordinarte
 - d) base
8. The other name for derived class is _____.
- a) **subclass**
 - b) super class
 - c) subordinate class
 - d) base class
9. What does your class can hold?
- a) data
 - b) functions
 - c) **both a & b**
 - d) none of the mentioned
10. Which key word is used to check exception in the block of code?
- a) catch
 - b) throw
 - c) **try**
 - d) none of the above
11. When a class A inherits its properties from class B and class C, then the inheritance is said to be _____ inheritance
- a) **multiple**
 - b) multilevel
 - c) single
 - d) hybrid
12. Definition of the function is not necessary in _____.
- a) virtual functions

- b) function overloading
 - c) pure virtual functions**
 - d) operator overloading
13. If class A inherits from class B, then B is called _____ of A. A is called _____ of B.
- a) Super class, Sub class**
 - b) Subclass, Super class
 - c) Abstract class, Base Class
 - d) Child class, Sub Class
14. Which of the following is not a keyword?
- a) inherit**
 - b) auto
 - c) extern
 - d) void
15. _____ is a default access specifier for members of class in C++.
- a) protected
 - b) public
 - c) private**
 - d) default
16. _____ is the situation in which a derived class has only one base class.
- a) Single inheritance**
 - b) inheritance
 - c) Multiple inheritance
 - d) others
17. A function qualified by the _____ keyword
- a) virtual functions**
 - b) function overloading
 - c) pure virtual functions
 - d) operator overloading
18. A base class which allows its public and protected members to be inherited as respectively public and protected members of the derived class are called as _____
- a) virtual functions
 - b) function overloading
 - c) Public base class**
 - d) operator overloading
19. A feature that allows the extension of existing code.
- a) virtual
 - b) overloading
 - c) Extensibility**
 - d) operator
20. The source code that embodies the realization of the design are _____
- a) functions
 - b) overloading
 - c) Implementation**
 - d) operator overloading

UNIT V

1. Set precision requires the header file _____.
 - a) stdlib.h.
 - b) iomanip.h.**
 - c) console.h.
 - d) conio.h.
2. The file iostream includes _____.
 - a) The declarations of the basic standard input-output library.**
 - b) The streams of includes and outputs of program.
 - c) Comment lines.
 - d) only strings.
3. Which one of the following is a built in function?
 - a) stringlen()
 - b) strlen()
 - c) strlen()**
 - d) strleng()
4. A file is closed explicitly using _____.
 - a) fclose()
 - b) file_close()
 - c) fin.close()
 - d) filestream_object.close()**
5. Which one of the following reads a single character from file?
 - a) cin()
 - b) put()
 - c) get()**
 - d) getw()
6. _____ have the return type void?
 - a) all functions
 - b) constructors
 - c) destructors
 - d) none of the mentioned**
7. _____ function specifies the required number of fields to be used while displaying the output value.
 - a) with()
 - b) width()**
 - c) fill()
 - d) setf()
8. _____ function specifies the number of digits to be displayed after decimal point.
 - a) width()
 - b) precision()**
 - c) fill()
 - d) setf()
9. _____ function clears the flags.
 - a) width()
 - b) precision()
 - c) unsetf()**

- d) setf()
10. setf() function _____
a) clears the flags.
b) specifies the number of digits to be displayed after decimal point.
c) specifies the required number of fields to be used while displaying the output value.
d) sets format flags that control the format of output display
11. _____ is the file mode for opening a file in input mode.
a) ios::in
b) ios::out
c) ios::trunc
d) ios::noreplace
12. _____ is the file mode for opening a file in output mode.
a) ios::in
b) ios::out
c) ios::trunc
d) ios::noreplace
13. The _____ is the function that detects the end of file.
a) eof()
b) getline()
c) putline()
d) clear()
14. _____ supports simultaneous input and output operations on file.
a) ifstream
b) fopen
c) ostream
d) fstream
15. _____ is used to write a single character to output file.
a) cin()
b) put()
c) get()
d) getw()
16. _____ allows access to the specific data without need for accessing its preceding its data items.
a) sequential file
b) random file
c) get file
d) put file
17. getline() and write() are _____ oriented functions.
a) line
b) character
c) data
d) integer
18. A file containing machine code that has been linked and is ready to be run on a computer is _____
a) Executive file b) File c) Flag d) Format
19. A collection of files are _____

- a) List **b) Library** c) Local d) Lifetime
20. A file containing source code _____
- a) Source file** b) file c) Local d) Lifetime

OBJECT ORIENTED PROGRAMMING WITH C++-16UEC308

K2 LEVEL

UNIT I

1. What are the basic concepts of OOP?

Data Abstraction, Data Hiding, Data Encapsulation, Inheritance and Polymorphism are the basic concepts of OOP.

2. How is OOP implement in C++?

A class binds together data and its associated function under one unit thereby enforcing encapsulation. The private and protected member remain hidden from outside world. Thus a class enforces data hiding

3. What is abstract class?

A class with no instances (no objects) is known as abstract class.

4. Define inheritance.

Inheritance is a process of creating new classes (derived classes) from existing classes (base classes). The derived classes not only inherit capabilities of the base class but also can add new features of own.

5. What is Polymorphism?

Polymorphism is briefly described as “one interface, many implementations”. Polymorphism is a characteristic of being able to assign a different meaning or usage to something in different contexts – specifically, to allow an entity such as a variable, a function, or an object to have more than one form.

6. Define Dynamic binding.

The addresses of the functions are determined at run time rather than compile time.

7. What is the role of #include directive in C++?

The preprocessor directive #include tells the compiler to insert another file into your source file. In effect, #include directive is replaced by the contents of the file indicated.

8. What is Class?

A group of objects that share common properties and relationships.

9. What is Message Passing?

The philosophy that objects only interact by sending messages to each other.

10. What is Object?

An entity that can store data and, send and receive messages.

UNIT II

1. What is static class data?

Static data members of a class are declared by preceding the member variable's declaration with the keyword static.

2. What is token?

The smallest individual units in a program are known as tokens.

3. What are variables?

A name that refers to a value.

4. What is Inline Function?

A function definition such that each call to the function is, in effect, replaced by the statements that define the function.

5. What is IF statement?

If statement is decision making control and its general form is :

6. What is switch statement?

It is used to make choice between multiple options. When a decision is to be made depending upon value of an expression and the programmer knows the possible values it is going to take.

7. What is loop statement?

Loops are used to carry out certain instruction(s) in continuation for a fixed no of times.

8. What is Do- while loop statement?

This is similar to while loop; the only difference is unlike while loop, in do-while loop condition is checked after the loop statements are executed. This means the statements in the do while loop are executed at least once; even if the condition fails for the first time itself.

9. What is For loop statement?

It does exactly the same thing as while loop; only difference is the initialization, the condition statement is written on the same line.

This is used when we want to execute certain statements for a fixed number of times.

This is achieved by initializing a loop counter to a value and increasing or decreasing the value for certain no of times until a condition is satisfied. The loop statements are executed once for every iteration of the for loop.

10. What is Typecasting?

C++ is very strict about type compatibility. Different variable types must be cast when their values are assigned to each other. Type cast operator is used for explicit type conversion of variables.

UNIT III

1. What is a constructor?

Constructors allow initialization of objects at the time of their creation. Constructor function is a special function that is a member of the class and has same name as that of the class.

2. What are destructors?

Destructors are complements of constructors. When an object is destroyed, its destructor is automatically called. Destructors are mainly useful for doing the clean up job. E.g. an object may have allocated some memory during its lifetime; destructors are the place where this memory is deallocated.

3. What are the restrictions apply to constructors and destructors?

The following restrictions apply to constructors and destructors :

- Constructors and destructors don't return values.
- The addresses of constructors and destructors can't be taken so we can't use references and pointers on them.
- Constructors cannot be declared with the keyword virtual.

4. What is Friend Function?

A function that has access to the private members of a class but is not itself a member of the class.

5. How should a constructor handle a failure?

If construction fails at the runtime, it throws an exception.

- Constructor does not have return type, not even void. So, it is difficult to use return codes.
- Throws an exception is the best method to handle a failure constructor.

6. What is virtual constructors?

A constructor of a class cannot be virtual and if causes a syntax error.

7. What is Overloading?

A function feature that allows a function or operator to be given more than one definition.

8. What is Overriding?

The ability to change the definition of an inherited method or attribute in a subclass.

9. What is Array?

A collection of data elements arranged to be indexed in one or more dimensions.

10. What is Copy constructor?

The constructor that creates a new class object from an existing object of the same class.

UNIT IV

1. Define Base class

A class from which another class inherits.

2. Define Derived class.

A class inheriting properties from another class.

3. What is pointer?

Pointer is an address of a memory location. A variable, which holds an address of a memory location, is known as a Pointer variable (or Simply Pointer).

4. What are the different forms of inheritance in C++ ?

Single level inheritance, Multilevel inheritance, Hierarchical inheritance, Multiple inheritance and Hybrid inheritance.

5. What is Virtual Function?

A function qualified by the virtual keyword. When a virtual function is called via a pointer, the class of the object pointed to determines which function definition will be used.

6. What is mean by Visibility?

The ability of one object to be a server to others.

7. List out the types of polymorphism:.

There are two types of polymorphism:

1. Compile time polymorphism
2. Run time polymorphism

8. What is Compile time polymorphism?

Compile time polymorphism is method overloading whereas Runtime time polymorphism is done using inheritance and interface.

9. What is runtime polymorphism?

Runtime polymorphism is a process in which a call to an overridden method is resolved at runtime rather than at compile-time. In this process, an overridden method is called through the reference variable of a superclass.

10. What is Pure virtual function?

A virtual function that is declared in a base class but not defined there. The responsibility for defining the function falls on the derived classes, each of which generally provides a different definition.

UNIT V

1. What is I/O manipulators?

Functions that when “output” or “input” cause no I/O, but set various conversion flags or parameters.

2. What is Source stream?

The source stream that provides data to the program is called the input stream.

3. What is Destination stream?

It receives output from the program is called the output stream.

4. What is File?

A group of related records treated as a unit.

5. What is Console?

A console can mean different things depending on the context. It usually means a combination of a display monitor and an input device, usually a keyboard and pair, which allows a user to input commands and receive visual output from a computer or computer system.

6. What is a stream?

A stream is a sequence of byte.

7. What is a ofstream?

Stream class to write on files

8. What is a ifstream?

Stream class to read from files

9. What is a fstream?

Stream class to both read and write from/to files.

10. What is difference between get() and getline()?

Get() does not extract the delimiter newline character from input stream. On the other hand getline() does extract the delimiter newline character from the input stream so that the stream is empty after getline() is over.

OBJECT ORIENTED PROGRAMMING WITH C++-16UEC308

K3 LEVEL

UNIT I

1. Explain the popular OOPs languages.
2. What role does the iomanip file play?
3. What is C++?
4. What is Dynamic Binding? When do we use it?
5. How are data and functions organized in an object oriented program?

UNIT II

1. List out the “Basic Data Types”.
2. What is Constant Member Function?
3. What is mean by Returning Objects?
4. Explain “Constructors with Default Arguments”.
5. What is the application of the scope resolution operator:: in C++?

UNIT III

1. What is function overloading? Briefly explain it.
2. What is the use of Copy Constructor?
3. Explain Inline Function? Give an example.
4. Briefly explain the call by reference and return by reference.
5. What do you meant by overloading of a function? When do we use this concept?

UNIT IV

1. Simplify the uses of Virtual Function.
2. Describe the inheritance as applied to oop.
3. What is inheritance and how does it help us create new classes quickly?
4. What is a virtual base class? Explain it.
5. How is polymorphism achieved at compile time and run time?

UNIT V

1. Why are the words such as Cin and Cout not considered as keywords?
2. Write is unformatted console I/O operations? explain it.
3. What are the steps involved in using a file in a c++ program?
4. What are input and output streams?
5. What is a file mode? Describe the various file mode options available.

OBJECT ORIENTED PROGRAMMING WITH C++-16UEC308

K4 LEVEL

UNIT I

1. What are the basic concepts of Object Oriented Programming?
2. Briefly explain the software evaluation of programming paradigm?
3. What is meant by operator? And explain its types.
4. List a few areas of Applications of C++.
5. Explain the merits and demerits of oops.

UNIT II

1. Explain Call by Reference, Return by Reference and Call by Value.
2. Explain the Control Structures in C++.
3. Write short notes on
 - a)Token b)Keywords c)Identifiers & Constants
4. Briefly explain the Expressions and its types. What are included in Expressions.
5. Explain the Member Functions and its types.

UNIT III

1. What is a Friend Function? And its usages.
2. What is Operator Overloading? And briefly explain the rules of operator overloading.
3. What is function overloading? and its rules.
4. Explain the concept of constructor and its types.
5. Briefly explain the Array of Object.

UNIT IV

1. What are the different forms of inheritance?
2. Write a short note on:
 - i) Polymorphism
 - ii) Virtual Function
 - iii) Pure Virtual Function
 - iv) Pointer to Derived classes.
3. Describe the syntax of the Single Inheritance in C++.
4. Explain the Base class and Derived class.
5. Describe the syntax of the Multiple Inheritance in C++.

UNIT V

1. Write is formatted console I/O operations? explain it.
2. Briefly explain the “Open and Close of the Files”.
3. Explain the terms Base Class, Derived Class.
4. Discover the function of C++ streams.
5. Write is Unformatted console I/O operations? explain it.