Interview Questions

01.What is the Class?

i) Class is a blue print that defines the variables and methods common to all objects of certain kind.

ii) It exists in logically but not in physically

iii) Collection of Objects is called Class.

02. What do you mean by Inheritance? Or 03. What is Inheritance?

Inheritance is defined as when one child object acquires all the properties and behaviours of a parent object it is known as Inheritance.

04. Which are the types of Inheritance?

i) Single Inheritance

ii) Multi level Inheritance

iii) Hierarchical Inheritance

iv) Hybrid Inheritance

v) Multiple Inheritance

Java does not supports Multiple Inheritance

05. What is Static Keyword?

Static is a keyword which is used mainly for memory management . We can apply static keyword with variable, methods, blocks and nested classes. The static keyword belongs to the class than an instance of the class.

06. What do you mean by Constructor?

Constructor is a special type of method that is used to initialize the object of a class. Both class name and constructor name should be same. It does not have return type.

07. Tell me the types of Constructor?

i) Default Constructor

ii) Parameterized Constructor

08. What are the different ways of creating Objects in java?

i) By using **new** Keyword

ii) By using New **Instance**

iii) By using **Clone()** method

09. What is the use of Instanceof operator?

Instanceof is an operator which is used to check object reference. It checks whether the reference of an object belongs to the provided type or not.

10.What are checked and unchecked exceptions?

i) Checked exceptions happen at compile time when the source code is transformed into an executable code.

ii) Unchecked exceptions happen at runtime when the executable program starts running.

11. What are the different types of Checked Exceptions?
   i) ClassNotFoundException
   ii) IOException
   iii) SQLException
   iv) FileNotFoundException

12.What are the different types of Checked Exceptions?
   i) ArithmeticException
   ii) ArrayIndexOutOfBoundException
   iii) NumberFormatException
   iv)NullPointerException

13.Explain the use of "throws" keyword?

i) The throws keyword in Java is used to declare exceptions that can occur during the execution of a program.

ii) we can throw multiple exceptions using the throws keyword.

14.How to create user defined exception?
   i) By extends the exception class.

   Eg: public class Myfile extends exception{ }

15.Can you explain the finally keyword?
   Java finally block is always executed whether an exception is handled or not.

16.What is the default value of Static Word?
   The default value of **static** variable is **zero(0)**.

17. What is interface and its use?
   Interface is a collection of abstract methods and constants.(Static and final fields).
   It is used to achieve the complete abstraction.

18.What are marker interface? Can you list out some marker interfaces?
   Marker interface is an interface with no method declared. The most common use of extending interfaces occurs when the parent interface does not contain any methods.
   i) Serializable interface
   ii) Remote interface
   iii) Cloneable interface

19. What are Wrapper objects? List out some of the Wrapper objects?

Conversion of primitive datatypes into objects is called wrapper objects.
i) Integer
ii) Boolean
iii) Double
iv) Char
v) Short
Vi) Long

20. What is boxing and unboxing?

Converting primitive datatype to object is called **boxing**.
converting an object into corresponding primitive datatype is known as **unboxing**.

21. Which is cosmic super class for all the java classes?

Object class is the cosmic superclass in Java.

22.What are methods of Object super class?

i) toString()
ii) clone()
iii) equal()
iv) wait()
v) finalize()

23.What is use of this() keyword?

It is a **reference variable** that refers to the current object.
The **this** keyword refers to the current object in a method or constructor.

24.What is use of super() keyword?

The **super** keyword is a reference variable which is used to refer immediate parent class object.

1. super can be used to refer immediate parent class instance variable.

2. super can be used to invoke immediate parent class method.

3. super() can be used to invoke immediate parent class constructor.

25. What is serialization? How to achieve it?

Serialization in Java is a mechanism of *writing the state of an object into a byte-stream*

For serializing the object, we call the writeObject() method of *ObjectOutputStream* class

26. What is use of transient keyword?

The transient keyword can be used with the data members of a class in order to avoid their serialization.

27. What is shallow cloning? How to achieve it?

     i) This behaviour of cloning is known as Shallow Cloning .
     ii) Copy of the existing object which points to same heap memory.
     iii) It is achieved using clone().

28.What are the properties of HashSet?
    i) HashSet stores the elements by using a mechanism called hashing.
    ii) It contains unique elements only.
    iii) It allows null value.
    iv) HashSet class is non synchronized.
    v) HashSet doesn't maintain the insertion order. Here, elements are inserted on the
       basis of their hashcode.
    vi) HashSet is the best approach for search operations.
    vii) The initial default capacity of HashSet is 16, and the load factor is 0.75.

29.Explain Comparator and Comparable interface?
       Comparator provides compare() to sort the elements, multiple elements sort at a time.
       Comparable provides compare() to sort the elements, single elements sort at a time.

30.How to convert List to Array and vice-versa?

  List to Array:

       i) Using get() method of List

       ii) Using toArray() method

       iii) List<Integer> myList = Arrays.asList(76, 23, 91, 45, 21, 82);

  Array to List:
     i)Native method

     ii) Using Arrays.asList() Method

1. List<T> list = **new** ArrayList<>();
2. List<Book03> book = new ArrayList<Book03>();

31.How to achieve inheritance in Java?
     Inheritance is implemented by using the extends keyword.

32. Which collection provides the sorted collection?
     Sorted set
     Collections.sort()