

- 1 What is an object ?
- 2 What is method overriding in java ?
- 3 What is super keyword in java ?
- 4 What is method overloading in java ?
- 5 What is difference between c++ and Java ?
- 6 What is JIT compiler ?
- 7 What is bytecode in java ?
- 8 Difference between method overloading and method overriding in java ?
- 9 Difference between abstract class and interface ?
- 10 Why java is platform independent?
- 11 Difference between this( and super( in java ?
- 12 How to call one constructor from the other constructor ?
- 13 what are static blocks and static initializers in Java ?
- 14 What is method in java ?
- 15 What is constructor in java ?
- 17 Difference between Character Constant and String Constant in java ?
- 18 Why main( method is public, static and void in java ?
- 19 Explain about main( method in java ?
- 20 What is difference between length and length( method in java ?
- 21 What is ASCII Code?
- 22 What is Unicode ?
- 23 What are constants and how to create constants in java?

## OOPS:-

- 24 Explain about object oriented programming and its features?
- 25 What is Abstraction?
- 26 What is Encapsulation?
- 27 What is the difference between abstraction and encapsulation?
- 28 List out benefits of object oriented programming language?
- 29 Differences between traditional programming language and object oriented programming language?
- 30 What is Inheritance?
- 31 What is Polymorphism?
- 32 How does Java implement polymorphism?
- 33 Explain the different forms of Polymorphism
- 34 What is runtime polymorphism or dynamic method dispatch?
- 35 What is Dynamic Binding?
- 36 What is method overloading?
- 37 What is method overriding?
- 38 What are the differences between method overloading and method overriding?
- 39 Can overloaded methods be override too?
- 40 Is it possible to override the main method?
- 41 How to invoke a superclass version of an Overridden method?
- 42 What is super?
- 43 How do you prevent a method from being overridden?

- 44 What is an Interface?
- 45 Can we instantiate an interface?
- 46 Can we create an object for an interface?
- 47 Do interfaces have member variables?
- 48 What modifiers are allowed for methods in an Interface?
- 49 What is a marker interface?
- 50 What is an abstract class?
- 51 Can we instantiate an abstract class?
- 52 What are the differences between Interface and Abstract class?
- 53 When should I use abstract classes and when should I use interfaces?
- 54 When you declare a method as abstract, can other non abstract methods access it?
- 55 Can there be an abstract class with no abstract methods in it?
- 56 What is IS-A relationship in java?
- 57 What is HAS A relationship in java?
- 58 Difference between IS-A and HAS-A relationship in java?
- 59 Explain about instanceof operator in java?
- 60 What does null mean in java?
- 61 Can we have multiple classes in single file ?
- 62 What all access modifiers are allowed for top class ?
- 63 What are packages in java?
- 64 Can we have more than one package statement in source file ?
- 65 Can we define package statement after import statement in java?
- 66 What are identifiers in java?
- 67 What are access modifiers in java?
- 68 What is the difference between access specifiers and access modifiers in?
- 69 What access modifiers can be used for class ?
- 70 Explain what access modifiers can be used for methods?
- 71 Explain what access modifiers can be used for variables?
- 72 What is final access modifier in java?
- 73 Explain about abstract classes in java?
- 74 Can we create constructor in abstract class ?
- 75 What are abstract methods in java?

## **Type Casting**

- 76 What is TypeConversion?
- 77 Explain Implicit Conversion/ Widening/Automatic Type Conversion?
- 78 What is Explicit Conversion/Narrowing/Casting?
- 79 Can a double value be cast to byte? How to cast double value to byte with help of the example?
- 80 Can a Boolean primitive value to be converted to any other primitive in java?
- 81 What is autoboxing and autounboxing?
- 82 What are advantages of autoboxing and autounboxing?
- 83 How to cast objects or what is object casting?
- 84 What is upcasting or downcasting?

## Exception Handling

- 85 State some situations where exceptions may arise in java?
- 86 What is Exception handling in java?
- 87 What is an error in Java?
- 88 What are advantages of Exception handling in java?
- 89 In how many ways we can do exception handling in java?
- 90 List out five keywords related to Exception handling ?
- 91 Explain try and catch keywords in java?
- 92 Can we have try block without catch block?
- 93 Can we have multiple catch block for a try block?
- 94 Explain importance of finally block in java?
- 95 Can we have any code between try and catch blocks?
- 96 Can we have any code between try and finally blocks?
- 97 Can we catch more than one exception in single catch block?
- 98 What are checked Exceptions?
- 99 What are unchecked exceptions in java?
- 100 Explain differences between checked and Unchecked exceptions in java?
- 101 What is default Exception handling in java?
- 102 Explain throw keyword in java?
- 103 Can we write any code after throw statement?
- 104 Explain importance of throws keyword in java?
- 105 Explain the importance of finally over return statement?
- 106 Explain a situation where finally block will not be executed?
- 107 Can we use catch statement for checked exceptions?
- 108 What are user defined exceptions?
- 109 Can we rethrow the same exception from catch handler?
- 110 Can we nested try statements in java?
- 111 Explain the importance of throwable class and its methods?
- 112 Explain when ClassNotFoundException will be raised ?
- 113 Explain when NoClassDefFoundError will be raised ?

## Nested Class & Inner Class

- 114 What are inner classes or non static nested classes in java?
- 115 Why to use nested classes in java?
- 116 Explain about static nested classes in java?
- 117 How to instantiate static nested classes in java?
- 118 Explain about method local inner classes or local inner classes in java?
- 119 Explain about features of local inner class?
- 120 Explain about anonymous inner classes in java?
- 121 Explain restrictions for using anonymous inner classes?
- 122 Is this valid in java ? can we instantiate interface in java?
- 123 Explain about member inner classes?
- 124 How to instantiate member inner class?

- 125 How to do encapsulation in java?
- 126 What are reference variables in java ?
- 127 Will the compiler creates a default constructor if I have a parameterized constructor in the class?
- 128 Can we have a method name same as class name in java?
- 129 Can we override constructors in java?
- 130 Can Static methods access instance variables in java?
- 131 How do we access static members in java?
- 132 Can we override static methods in java?
- 133 Difference between object and reference?
- 134 Objects or references which of them gets garbage collected?
- 135 How many times finalize method will be invoked ? who invokes finalize( method in java?
- 136 Can we able to pass objects as an arguments in java?
- 137 Explain wrapper classes in java?
- 138 Explain different types of wrapper classes in java?
- 139 Explain about transient variables in java?
- 140 Can we serialize static variables in java?
- 141 What is type conversion in java?
- 142 Explain about Automatic type conversion in java?
- 143 Explain about narrowing conversion in java?
- 144 Explain the importance of import keyword in java?
- 145 Explain naming conventions for packages ?
- 146 What is classpath ?
- 147 What is jar ?
- 148 What is the scope or life time of instance variables ?
- 149 Explain the scope or life time of class variables or static variables?
- 150 Explain scope or life time of local variables in java?
- 151 Explain about static imports in java?
- 152 Can we define static methods inside interface?
- 153 Define interface in java?
- 154 What is the purpose of interface?
- 155 Explain features of interfaces in java?
- 156 Explain enumeration in java?
- 157 Explain restrictions on using enum?
- 158 Explain about field hiding in java?
- 159 Explain about Varargs in java?
- 160 Explain where variables are created in memory?
- 161 Can we use Switch statement with Strings?
- 162 In java how do we copy objects?

## Threads

- 163 What is thread in java?
- 164 Difference between process and thread?
- 165 What is multitasking ?
- 166 What are different types of multitasking?
- 167 What are the benefits of multithreaded programming?
- 168 Explain thread in java?
- 169 List Java API that supports threads?
- 170 Explain about main thread in java?
- 171 In how many ways we can create threads in java?
- 172 Explain creating threads by implementing Runnable class?
- 173 Explain creating threads by extending Thread class ?
- 174 Which is the best approach for creating thread ?
- 175 Explain the importance of thread scheduler in java?
- 176 Explain the life cycle of thread?
- 177 Can we restart a dead thread in java?
- 178 Can one thread block the other thread?
- 179 Can we restart a thread already started in java?
- 180 What happens if we don't override run method ?
- 181 Can we overload run( method in java?
- 182 What is a lock or purpose of locks in java?
- 183 In how many ways we can do synchronization in java?
- 184 What are synchronized methods ?
- 185 When do we use synchronized methods in java?
- 186 When a thread is executing synchronized methods , then is it possible to execute other synchronized methods simultaneously by other threads?
- 187 When a thread is executing a synchronized method , then is it possible for the same thread to access other synchronized methods of an object ?
- 188 What are synchronized blocks in java?
- 189 When do we use synchronized blocks and advantages of using synchronized blocks?
- 190 What is class level lock ?
- 191 Can we synchronize static methods in java?
- 192 Can we use synchronized block for primitives?
- 193 What are thread priorities and importance of thread priorities in java?
- 194 Explain different types of thread priorities ?
- 195 How to change the priority of thread or how to set priority of thread?
- 196 If two threads have same priority which thread will be executed first ?
- 197 What all methods are used to prevent thread execution ?
- 198 Explain yield( method in thread class ?
- 199 Is it possible for yielded thread to get chance for its execution again ?
- 200 Explain the importance of join( method in thread class?
- 201 Explain purpose of sleep( method in java?
- 202 Assume a thread has lock on it, calling sleep( method on that thread will release the lock?
- 203 Can sleep() method causes another thread to sleep?
- 204 Explain about interrupt() method of thread class ?

- 205 Explain about interthread communication and how it takes place in java?
- 206 Explain wait() , notify() and notifyAll() methods of object class ?
- 207 Explain why wait(), notify() and notifyAll() methods are in Object class rather than in thread class?
- 208 Explain IllegalMonitorStateException and when it will be thrown?
- 209 when wait(), notify(),notifyAll() methods are called does it releases the lock or holds the acquired lock?
- 210 Explain which of the following methods releases the lock when yield(), join(),sleep(),wait(),notify(), notifyAll()methods are executed?
- 211 What are thread groups?
- 212 What are thread local variables ?

RaghuSir-9740642202

- 213 What are daemon threads in java?
- 214 How to make a non daemon thread as daemon?
- 215 Can we make main() thread as daemon?

## **Collection Framework**

- 216 What is collection ?
- 217 Difference between collection, Collection and Collections in java?
- 218 Explain about Collection interface in java ?
- 219 List the interfaces which extends collection interface ?
- 220 Explain List interface ?
- 221 Explain methods specific to List interface ?
- 222 List implementations of List Interface ?
- 223 Explain about ArrayList ?
- 224 Difference between Array and ArrayList ?
- 225 What is vector?
- 226 Difference between arraylist and vector ?
- 227 Define Linked List and its features with signature ?
- 228 Define Iterator and methods in Iterator?
- 229 In which order the Iterator iterates over collection?
- 230 Explain ListIterator and methods in ListIterator?
- 231 Explain about Sets ?
- 232 Implementations of Set interface ?
- 233 Explain HashSet and its features ?
- 234 Explain Tree Set and its features?
- 235 When do we use HashSet over TreeSet?
- 236 What is Linked HashSet and its features?
- 237 Explain about Map interface in java?
- 238 What is linked hashmap and its features?
- 239 What is SortedMap interface?
- 240 What is Hashtable and explain features of Hashtable?
- 241 Difference between HashMap and Hashtable?
- 242 Difference between arraylist and linkedlist?
- 243 Difference between Comparator and Comparable in java?
- 244 What is concurrent hashmap and its features ?
- 245 Difference between Concurrent HashMap and Hashtable and collections.synchronizedHashMap?
- 246 Explain copyOnWriteArrayList and when do we use copyOnWriteArrayList?
- 247 Explain about fail fast iterators in java?
- 248 Explain about fail safe iterators in java?

## **Serialization**

- 249 What is serialization in java?
- 250 What is the main purpose of serialization in java?
- 251 What are alternatives to java serialization?
- 252 Explain about serializable interface in java?
- 253 How to make object serializable in java?
- 254 What is serial version UID and its importance in java?
- 255 What happens if we don't define serial version UID ?
- 256 Can we serialize static variables in java?
- 257 When we serialize an object does the serialization mechanism saves its references too?
- 258 If we don't want some of the fields not to serialize How to do that?
- 259 Explain importance of object class in java?
- 260 Explain purpose of object class or why object class is super class for all java classes?
- 261 Explain Object class methods?
- 262 List methods which can be overridden from Object class?
- 263 Explain purpose of toString() method in java?



## Strings

- 264 Explain Strings in java?
- 265 Difference between Strings and Character Arrays in java?
- 266 Explain importance of String class in java?
- 267 In how many ways we can create Strings in java?
- 268 Explain how to create Strings using String literal and advantages of creating Strings using String literal?

## Class Loaders

- 269 What are classloaders and different types of class loaders in java?
- 270 What is BootStrap class loader and how does it works?
- 271 What is Extensions class loader and how does it works?
- 272 What is application class loader and how does it works?
- 273 When an object becomes eligible for garbage collection?
- 274 Who performs garbage collection?
- 275 When does garbage collector run?
- 276 Which algorithm garbage collector uses to perform garbage collection?
- 277 List out different garbage collection algorithms?
- 278 Can we force JVM for garbage collection?
- 279 How to request jvm to perform garbage collection operation?
- 280 Explain the purpose of finalize method in relation to Garbage collection?
- 281 How many times finalize method is called on an Object?
- 282 Once an object is garbage collected can it become reachable again?
- 283 How to write a code that makes an object eligible for garbage collection?