1. What is the latest JDK Version? Give its features.
2. What is Object Oriented Programming? How does it differ from Procedure Oriented Programming?
3. What is inheritance?
4. What is encapsulation?
5. What is abstraction?
6. What is polymorphism?
7. How does java achieve multiple-inheritance?
8. What is difference between encapsulation and abstraction?
9. What is compile time polymorphism and run-time polymorphism?
10. What is difference between JDK and JRE and JVM?
11. What is difference between JAR, WAR and EAR file?
12. What is a class?
13. What is an object?
14. What is a reference?
15. What is difference between local Variable, Instance Variable and Class Variable?
16. What is transient?
17. What is volatile?
18. What are the different data-types in java?
19. What are different primitives in java?
20. What are different default values for primitives in java?
21. What is difference between object and reference?
22. What is an interface?
23. What is special with the interface variables?
24. What are different access modifiers in java? Explain?
25. What is special about functions in interfaces? By default they are…?
26. What is an abstract class?
27. Can we have an abstract class without any abstract method?
28. Can an abstract class be instantiated or inherited?
29. What is the signature of equals() method?
30. What is the signature of hashcode() method?
31. Is it necessary to override hashCode() whenever we override equals()? Why or Why not?
32. Is it necessary to override equals() whenever we override hashcode()? Why or Why not?
33. What is difference between == and equals()
34. What is an immutable class? Give example.
35. How can you make a class immutable?
36. What is the difference between String, StringBuffer and StringBuilder class?
37. What is a static class?
38. What is static variable? How does it differ from non-static variable?
39. Can we have a static method with non-static variable inside it? Why or why not?
40. Can we have a non-static method with static variable inside it? Why or why not?
41. What is a static method?

42. What is a final class? Give one example.
43. What is a final method?
44. What is a final variable?
45. What are constructors?
46. How can you call one constructor from another?
47. What is use of super?
48. What is an inner class?
49. What are different types of inner class? Explain each.
50. What is overloading?
51. Can access modifier of overloaded method be changed?
52. Can return type of overloaded method be changed?
53. Can arguments of overloaded method be changed?
54. Can overloaded method throw new or broader exceptions?
55. What is overriding?
56. Can access modifier of overridden method be changed?
57. Can return type of overridden method be changed?
58. Can arguments of overridden method be changed?
59. Can overridden method throw new or broader exceptions?
60. Can a static method be overridden?
61. What are different ways in which you can read a file in java?
62. What are different ways in which you can write to a file in java?
63. What are streams?
64. What is serialization?
65. What is a marker interface? Give one example.
66. What are collections?
67. What is collection?
68. What is difference between CollectionS and collection?
69. How are collections sorted?
70. What is Comparable interface? How many methods does it have?
71. What is Comparator interface? How many methods does it have?
72. What are List, Set and Map?
73. What are implementations of List?
74. What are implementations of Set?
75. What are implementations of Map?
76. Which implementations of List are ordered/Sorted?
77. Which implementations of Set are ordered/Sorted?
78. Which implementations of Map are ordered/Sorted?
79. What is difference between ArrayList and Vector?
80. What is difference between HashTable and HashMap?
81. How a HashMap works?
82. What is FIFO and LIFO?

83. What is a Stack?
84. What is a Queue?
85. What is an exception? How does it differ from Error?
86. Give exception class-hierarchy.
87. What is checked exception?
88. What is unchecked exception?
89. Give try-catch-finally flow of execution.
90. What is finally?
91. Is the order of exceptions in catch blocks mandatory? What should be the order?
92. What is difference between throw and throwS?
93. When will you get OutOfMemory error?
94. When will you get StackOverFlowException?
95. What is null pointer exception?
96. What is ArrayIndexOutOfBoundsException?
97. What is serialization and deserialization?
98. What are generics?
99. What is Garbage Collection in java?
100. What is final, finally and finalize?
101. What is Synchronized block and synchronized method?
102. What is thread how does it differ from a process?
103. What are the two ways a thread can be created in java?
104. How wait(), notify() and notifyAll() are used to synchronize threads?
105. What is an Executor?
106. What is an ExecutorService?
107. What is ExecutorS?
108. What is Future?
109. What are concurrent data structures?
110. What are different types of memory spaces in java?
111. Where are Objects stored in Java?
112. Where are local variables stored in Java?

113. What are design patterns you have worked on?
114. What is Singleton pattern? Can you write a code?
115. Write Singleton pattern with double-checking?
116. Knowledge on below design patterns…

Creational(5)	Structural (8)	Behavioral (12)	Composed (8)	Concurrency
Singleton	Adapter	Chain of responsibility	MVC	Single Thread Execution
Factory	Bridge	Command	Business Delegate	
Abstract Factory	Filter	Interpreter	Composite Entity	
Builder	Composite	Iterator	Data Access Object	
Prototype	Decorator	Mediator	Front Controller	
	Façade	Memento	Intercepting Filter	
	Flyweight	Observer	Service Locator	
	Proxy	State	Transfer Object	
		Null Object		
		Strategy		
		Template		
		Visitor		

117. Knowledge on Enterprise patterns…

Presentation Tier	Business Tier	Integration Tier
Intercepting Filter	Business Delegate	Data Access Object
Front Controller	Composite Entity (formally Aggregate Entity)	Service Activator
Dispatcher View	Service Locator	
Composite View	Session Facade	
Service To Worker	Transfer Object (formally Value Object)	
View Helper	Transfer Object Assembler (formally Value Object Assembler)	
	Value List Handler	

Tools, Methodologies and Processes

1. What are different version control systems you worked?
2. Which are the development tools you have used?
3. Which build tools you have used?
4. Which defect-management/issue-tracking tools you have used?
5. Which testing tools you have used?
6. What development Methodologies you have been on?
   (Agile / Waterfall / Iterative)
7. What is waterfall model?