

I. BASICS of Java

1. Explain JVM.
2. Explain Bytecode.
3. Explain the three principles of Java.
4. What is class and instance of a class?
5. What are objects? How to create objects?
6. Explain the features of OOP.
7. Explain how the concept of polymorphism is implemented in Java?
8. Explain encapsulation in the object oriented programming.
9. What is encapsulation? How does Java achieve encapsulation?
10. How does Java incorporates the concept of polymorphism? Give one example.
11. What do you understand by encapsulation in Java?
12. Explain the steps involved in implementation of a Java program.
13. Explain the use of JVM.
14. What is Java Development Kit (JDK)?
15. Explain the term polymorphism with an example.
16. Explain the features of Java.

II. DATA TYPES

17. Is the following statement true or false? If it is false then supply suitable example:
“The data is lost when converted from higher data type to lower data type.”
18. Can you make the keyword public to private in main() method? If yes, what will happen?
19. Explain with an example data types boolean and byte in Java.
20. Explain with an example data type byte in Java.
21. What is type conversion in Java? Explain with an example.
22. Write the difference between the operators = and == in Java.
23. What is type casting? Give an example to explain it.
24. What are literals? State the boolean literals.
25. List the different operators in Java.
26. What are literals in Java? Mention their different types.
27. What are different integer data types in Java?
28. Explain any two logical operators in Java with example.
29. What is meant by an assignment statement? For what purpose it is used?
30. State the bitwise operators in Java. Explain any one.

III. SELECTION STATEMENTS AND LOOPS

31. Write the difference between break and continue statements in Java.
32. Explain switch statement in Java.
33. Explain switch statement with example in Java.
34. Explain the goto statement in Java.
35. Explain while loop in Java.
36. Explain any one loop statement in Java with an example.

IV. ARRAY

37. Explain how arrays are created in Java? How array elements are accessed?
38. How do you declare an array in Java? Give an example.
39. How do you declare a two dimensional array in Java? Give an example.
40. Define an array. How do you declare and create array objects?

V. OBJECTS AND METHODS

41. Can you have two return statements in a method? Can you write any statement after return? Explain.
42. Write difference between constructor and method.
43. Can you have a method without return statement? Explain.
44. Explain the use of the keyword static in Java.
45. Explain overloading in Java.

46. Explain the return statement in Java.
47. State whether the following statement is true/false with justification “when a reference variable is assigned to another reference variable, another copy of object is created.”
48. Explain the keyword new in Java.
49. Explain the meaning of the keywords used in the declaration of main() method.
50. What is an instance variable? How does one access an instance variable of a class?
51. Explain different types of constructors in Java.
52. What are constructors? How are they different from methods?
53. Explain overloading methods with an example.
54. Write a short note on this keyword.

VI. INHERITANCE

55. Explain the finalize method.
56. What do you understand by an abstract class?
57. What is method overriding and how does it differ from method overloading in Java?
58. When can a method in super class be prevented from being overridden by a method in subclass? Explain by an example.
59. Explain in brief the overriding methods in Java.
60. Explain the use of the keyword final in Java programming.
61. Explain the use of finalize method.
62. State the different access specifiers available in Java.
63. What is method overriding and how does one prevent a method from being overridden?
64. State any two differences between method overloading and method overriding.
65. What do you understand by inheritance in Java?
66. How does a subclass constructor call a super class constructor?
67. Write a note on finalizer method.
68. Explain the keyword super in Java.
69. What is a class and a subclass? Give examples.
70. What is inheritance? Is multiple inheritance supported by Java?
71. What is data abstraction?
72. Explain the terms subclass and super class.
73. What are different access specifiers in Java?
74. What do you mean by final variable and final method?
75. Explain an abstract class.

VII. PACKAGE & INTERFACES

76. Explain the term package.
77. What is the major difference between an interface and a class?
78. Explain how to use a particular package in a Java program. Give example.
79. What is an interface? How is it implemented?
80. What do you mean by a package in Java?

VIII. APPLET

81. Write a method to fill a rectangle with red color.
82. What is an applet? How do applets differ from an application programs?
83. Explain life cycle of an applet.
84. Write a method in Java applet to display a circle.
85. How do we pass parameters to an applet? Give one example.
86. What does your method do when start() (life cycle of an applet) is called?
87. Explain destroy() method, a stage in the life cycle of an applet.
88. Write a method to display a message “Computer Programming” at position (50, 20) inside a square.
89. Explain drawRect () method in Graphics class with suitable example.
90. How getParameter () method is used in applet?
91. Explain Font class and Color class.
92. Explain the steps involved to execute and run an applet.
93. What is AWT? What are the various components in AWT?