Multiple Choice Questions

1. Who is considered as the creator of JAVA ?
    a. Dennis Richie
    b. Ken Thompson
    c. James Gosling
    d. Bjarne Stroupstrup
2. Which of the following statements about the Java language is true?
    a. Java supports only Procedural Oriented Programming approach
    b. Both Procedural and Object Oriented Programming are supported in Java
    c. Java supports only Object Oriented Programming approach
    d. None of the Above
3. JRE stands for
    a. Java Real time Environment
    b. Java Rapid Enterprise
    c. Java Runtime Environment
    d. None of the above
4. Java source files are compiled and converted to
    a. Object code
    b. machine code
    c. Bytecode
    d. executable file
5. JVM is _____for bytecode
    a. compiler
    b. an interpreter
    c. assembler
    d. none of the above
6. What is the size of int data type in java?
    a. 16 bit
    b. 32 bit
    c. 64 bit
    d. Depends on execution environment
7. Which of these values can a boolean variable contain?
    a. True & False
    b. 0 & 1
    c. Any integer value.
    d. Both a & b
8. Which one of the following is a valid identifier in java?
    a. x1
    b. 1x
    c. $x
    d. x 1

9. Which operator is used to implement an unsigned right shift of an integer?
    a. <<
    b. >>
    c. <<<
    d. >>>
10. Which of the following loops will execute the body of loop even when condition controlling the loop is initially false?
    a. do-while
    b. while
    c. for
    d. None of the mentioned
11. Which of these is necessary condition for automatic type conversion in Java?
    a. The destination type is smaller than source type.
    b. The destination type is larger than source type.
    c. The destination type can be larger or smaller than source type.
    d. None of the mentioned
12. Which of these is an incorrect array declaration?
    a. int arr[] = new int[5];
    b. int [] arr = new int[5];
    c. int arr[]; arr = new int[5];
    d. int arr[] = int [5] new
13. Which of these selection statements test only for equality?
    a. if
    b. switch
    c. Both a & b
    d. None of the mentioned
14. Which of these are selection statements in Java?
    a. if
    b. for
    c. continue
    d. all of these
15. The keyword used to create a constant variable
    a. const
    b. static
    c. final
    d. none of these
16. What is stored in the object obj in following lines of code? box obj;
    a. Memory address of allocated memory of object.
    b. NULL
    c. Any arbitrary pointer
    d. Garbage

17. Which of the following is a valid declaration of an object of class Box?
    a. Box obj = new Box();
    b. Box obj = new Box;
    c. obj = new Box();
    d. new Box obj;
18. Name the keyword that makes a variable belong to a class, rather than being defined for each instance of the class.
    a. static
    b. final
    c. abstract
    d. public
19. Variables declared with in a class are called
    a. Identifier
    b. local variable
    c. instance variable
    d. global variable
20. Variables declared within a method or block are called
    a. Static variable
    b. local variable
    c. instance variable
    d. global variable
21. Defining methods with same name and different no. of parameters are called
    a. Method overriding
    b. Method overloading
    c. Dynamic method dispatch
    d. None of the above
22. _____ is used to initialize objects.
    a. Methods
    b. arguments
    c. constructors
    d. new keyword
23. What is the return type of Constructors?
    a. int
    b. float
    c. void
    d. None of the mentioned
24. Which of the following is a method having same name as that of its class?
    a. finalize
    b. delete
    c. class
    d. constructor

25. Which operator is used by Java run time implementations to free the memory of an object when it is no longer needed?
    a. delete
    b. free
    c. new
    d. None of the mentioned
26. Which of these access specifiers must be used for main() method?
    a. private
    b. public
    c. protected
    d. None of the mentioned
27. Which of these is used to access member of class before object of that class is created?
    a. public
    b. private
    c. static
    d. Protected
28. The keyword used to create an object
    a. class
    b. this
    c. new
    d. Malloc
29. The keyword used to refer the current object
    a. class
    b. this
    c. new
    d. Malloc
30. The method which is automatically invoked during garbage collection
    a. destructor
    b. terminate()
    c. finalize()
    d. destroy()
31. Which class cannot have a subclass in java
    a. abstract class
    b. parent class
    c. final class
    d. None of above
32. Which is the keyword used to inherit a class to another?
    a. Inherits
    b. extends
    c. implements
    d. import

33. The use of final keyword with method definition
    a. Supports method overriding
    b. implements dynamic method dispatch
    c. Prevents method overriding
    d. none of these
34. Identify the type of inheritance when two or more subclasses inherit the properties of a super class
    a. Multiple inheritance
    b. Single inheritance
    c. Multilevel inheritance
    d. Hierarchical inheritance
35. The keyword used inside a class to refer to its immediate super class is
    a. super
    b. parent
    c. base
    d. none of these
36. Which of the following is true in the case of abstract class
    a. Abstract constructors cannot be created.
    b. Abstract classes cannot be inherited.
    c. An abstract class contains only abstract methods
    d. All of the above
37. Which of these keywords are used to define an abstract class?
    a. abst
    b. abstract
    c. Abstract
    d. abstract class
38. If a class inheriting an abstract class does not define all of its function then it will be known as?
    a. abstract
    b. A simple class
    c. Static class
    d. None of the mentioned
39. Which method defined in Integer class can be used to convert a whole number in string type to primitive int type.
    a. valueOf()
    b. intValue()
    c. parseInt()
    d. getInteger()

40. A primitive data type can be passed as an argument into a method
    a. By value
    b. by reference
    c. both a & b
    d. none of these

41. Which of these is used as default for a member of a class if no access specifier is used for it?
    a. private
    b. public
    c. public, within its own package
    d. protected

42. Which of these keywords is used to refer to member of base class from a sub class?
    a. upper
    b. super
    c. this
    d. None of the mentioned

43. Which of these is correct way of inheriting class A by class B?
    a. class B + class A {}
    b. class B inherits class A {}
    c. class B extends A {}
    d. class B extends class A {}

44. Which of the following are true about interfaces
    a. Methods declared in interfaces are implicitly private.
    b. Variables declared in interfaces are implicitly public, static, and final.
    c. An interface contains any number of method definitions.
    d. The keyword implements indicate that an interface inherits from another.

45. Which of these keywords is used to define interfaces in Java?
    a. interface
    b. Interface
    c. intf
    d. implements

46. Which of these can be used to fully abstract a class from its implementation?
    a. Objects
    b. Packages
    c. Interfaces
    d. None of the Mentioned

47. Which of these access specifiers can be used for an interface?
    a. Public
    b. Protected
    c. private
    d. All of the mentioned

48. Which of these keywords is used by a class to use an interface defined previously?
    a. import
    b. Import
    c. implements
    d. Implements

49. Which of the following is correct way of implementing an interface salary by class manager?
    a. class Manager extends salary {}
    b. class Manager implements salary {}
    c. class Manager imports salary {}
    d. None of the Mentioned
50. The keyword used to create a package is
    a. import
    b. package
    c. classpath
    d. public
51. The modifier which specifies that the member can only be accessed in its own class is
    a. public
    b. private
    c. protected
    d. none
52. Which of the following package stores all the standard java classes?
    a. lang
    b. java
    c. java.util
    d. java.packages
53. Which of these is a mechanism for naming and visibility control of a class and its content?
    a. Object
    b. Packages
    c. Interfaces
    d. None of the Mentioned
54. Which of this access specifies can be used for a class so that its objects can be created by a different class in another package?
    a. Public
    b. Protected
    c. No Modifier
    d. All of the mentioned

55. Which of the following is correct way of importing an entire package 'pkg'?
    a. import pkg.
    b. Import pkg.
    c. import pkg.*
    d. Import pkg.*
56. Which of the following is incorrect statement about packages?
    a. Package defines a namespace in which classes are stored.
    b. A package can contain other package within it.
    c. Java uses file system directories to store packages.
    d. A package can be renamed without renaming the directory in which the classes are stored.

57. Which of these method of class String is used to extract a single character from a String object?
    a. CHARAT()
    b. chatat()
    c. charAt()
    d. ChatAt()
58. Which of these method of class String is used to obtain length of String object?
    a. get()
    b. Sizeof()
    c. lengthof()
    d. length()
59. Which of these keywords is not a part of exception handling?
    a. try
    b. finally
    c. thrown
    d. catch
60. The code within the---------- block will always be executed whether or not an exception is thrown.
    a. try..catch
    b. finally
    c. throw
    d. throws
61. Which of these keywords must be used to monitor for exceptions?
    a. try..catch
    b. finally
    c. throw
    d. throws

62. Which of these keywords is used to manually throw an exception?
    a. try
    b. finally
    c. throw
    d. catch
63. Which of these classes is related to all the exceptions that can be caught by using catch?
    a. Error
    b. Exception
    c. None of these
    d. a & b
64. Which of these classes is related to all the exceptions that cannot be caught?
    a. Error
    b. Exception
    c. None of these
    d. a & b

65.Which exception is thrown by read() method?

a. IOException
b. InterruptedException
c. SystemException
d. SystemInputException

66.Which is the super class of all exception classes

a. Exception
b. Object
c. Error
d. Throwable

67.Which class is the super class of all classes of the java.lang package?

a. Object
b. System
c. Super
d. Class

68.Which of the following exception is raised when a number is divided by zero

a. NumberFormatException
b. ArithmeticException
c. NullPointerException
d. IllegalArgumentException

69.A single try block must be followed by which of these?

a. finally
b. catch
c. catch or finally
d. None of the mentioned

70.Which of these exceptions will occur if we try to access the index of an array beyond its length?

a. ArithmeticException
b. ArrayException
c. ArrayIndexException
d. ArrayIndexOutOfBoundsException

71.Runnable is a

a. Class
b. Method
c. Variable
d. Interface

72.Thread priority in Java is represented as?

a. int
b. float
c. double
d. long

73.Which of these class is used to make a thread?

a. String
b. System
c. Thread
d. Runnable

74.Which of these interface is implemented to create a Thread?

a. Runnable
b. Connections
c. Set
d. MapConnections

75.Which of these method of Thread class is used to find out the priority given to a thread?

a. get()
b. ThreadPriority()
c. getPriority()
d. getThreadPriority()

76.Which of these methods is used to begin the execution of a thread?

a. run()
b. start()
c. runThread()
d. startThread()

77.Which of these method waits for the thread to treminate?

a. sleep()
b. isAlive()
c. join()
d. stop()

78.Which of these is used to read a string from the input stream?

a. get()
b. getLine()
c. read()
d. readLine()

79.Which of these classes is used to read characters and strings in Java from console?

a. BufferedReader
b. StringReader
c. BufferedStreamReader
d. InputStreamReader

80.Which of these classes are used by Byte streams for input operation?

a. InputStream
b. InputOutputStream
c. Reader
d. All of the mentioned

81.Which of these class contains the methods print() & println()?

a. System
b. System.out
c. BufferedOutputStream
d. PrintStream

82.Which of these methods can be used to write console output?

a. printout()
b. println()
c. write()
d. All of the mentioned

83.Which of these classes are used by character streams output operations?

a. OutputStream
b. Writer
c. ReadStream
d. InputOutputStream

84.Java Stream classes can be categorized into two groups:

a. Byte and Character Stream Classes
b. Stream and String Classes
c. String and Character Stream Classes
d. Buffer and Character Stream Classes

85.Byte Stream Classes support input/output operations on

a. 8 bit
b. 16 bit
c. 32 bit
d. 64 bit

86.Character Stream Classes support input/output operations on _____ characters:

a. 8 bit Unicode
b. 16 bit Unicode
c. 32 bit Unicode
d. 64 bit Unicode

87.Java supports input/output of data through the classes included in the _____ package:

a. Java.oi
b. java.out
c. java.in
d. java.io

88.The _____ class is used to write bytes to a file:

a. FileInputStream
b. FileOutputStream
c. FileBufferStream
d. FileStringStream

89. The_____ class is used to read characters from the file:
    a. StreamReader
    b. CharacterReader
    c. InputReader
    d. FileReader
90. Whenever the applet requires to redraw its output, it is done by using method
    a. display()
    b. paint()
    c. displayApplet()
    d. PrintApplet()
91. Which of these methods can be used to output a string in an applet?
    a. display()
    b. print()
    c. drawString()
    d. transient()
92. What does AWT stands for?
    a. All Window Tools
    b. All Writing Tools
    c. Abstract Window Toolkit
    d. Abstract Writing Toolkit
93. Which of these packages contains all the classes and methods required for event handling in Java?
    a. Java.applet
    b. java.awt
    c. java.event
    d. java.awt.event
94. What is an event in delegation event model used by Java programming language?
    a. An event is an object that describes a state change in a source.
    b. An event is an object that describes a state change in processing.
    c. An event is an object that describes any change by the user and system.
    d. An event is a class used for defining object, to create events.
95. Which of these methods are used to register a keyboard event listener?
    a. KeyListener()
    b. addKistener()
    c. addKeyListener()
    d. eventKeyboardListener()
96. Which of these methods are used to register a MouseMotionListener?
    a. addMouse()
    b. addMouseListener()
    c. addMouseMotionListner()
    d. eventMouseMotionListener()

97.What is a listener in context to event handling?

a. A listener is a object that is notified when an event occurs.
b. A listener is an interface that is notified when an event occurs.
c. A listener is a method that is notified when an event occurs.
d. None of the mentioned

98.Which of these class is super class of all the events?

a. EventObject
b. EventClass
c. ActionEvent
d. ItemEvent

99.Event class is defined in which of these libraries?

a. java.io
b. java.lang
c. java.net
d. java.util

100. Which of these events will be generated if scroll bar is manipulated?

a. ActionEvent
b. ComponentEvent
c. AdjustmentEvent
d. WindowEvent

101. Which of these events will be generated if we close a Frame window?

a. ActionEvent
b. ComponentEvent
c. AdjustmentEvent
d. WindowEvent

102. Which of these events is generated when a button is pressed?

a. ActionEvent
b. KeyEvent
c. WindowEvent
d. AdjustmentEvent

103. Which of these methods can be used to obtain the command name for ActionEvent object?

a. getCommand()
b. getActionCommand()
c. getActionEvent()
d. getActionEventCommand()

104. Which of these methods in KeyEvent class can be used to know which key is pressed?

a. getKeyCode()
b. getModifier()
c. getActionKey()
d. getActionEvent()

105. Which of these interfaces define a method actionPerformed()?
   a. ComponentListener
   b. ContainerListener
   c. ActionListener
   d. InputListener
106. Which of these interfaces define a method itemStateChanged()?
   a. ComponentListener
   b. ContainerListener
   c. ActionListener
   d. ItemListener
107. The default layout manager of an Applet is
   a. Flowlayout
   b. Gridlayout
   c. BorderLayout
   d. BoxLayout
108. Which package consist an applet class?
   a. Java.applet
   b. java.awt
   c. java.awt.applet
   d. java.event
109. The AWT component used to display a single line of read-only text
   a. A checkbox
   b. A Label
   c. A button
   d. A TextField
110. The AWT component used for taking input from user
   a. A TextBox
   b. A Label
   c. A button
   d. A TextField
111. The method to set the text of Textfield
   a. setLabel()
   b. setString()
   c. setText()
   d. setData()
112. The class used to create a Radio button in awt is
   a. Checkbox
   b. JRadioButton
   c. OptionButton
   d. CheckboxGroup

113. A---------- is an object that the user can see on the screen and-in most cases-interact with.

a. an Event
b. a window
c. a Component
d. a Listener

114. A---------- is a component that can hold other components.

a. A window
b. A container
c. A control
d. A form

115. The class used to make a standalone application in java.

a. Applet
b. Panel
c. Frame
d. Form

116. Which of the following is not an access modifier?

a. Protected
b. Void
c. Public
d. Confidential

117. When is the finalize() method called?

a. Before Garbage Collection
b. Before an object goes out of scope
c. Before a variable goes out of scope
d. None

118. What difference does it make when java is out of memory?

a. MemoryError
b. OutOfMemoryError
c. MemoryOutOfBoundsException
d. MemoryFullException

119. What is the use of 'javac' command?

a. Execute a java program
b. Debug a java program
c. Interpret a java program
d. Compile a java program

120. What part is used to compile ,debug and execute java program?
   a. JRE
   b. JIT
   c. JDK
   d. JVM
121. Which of these cannot be used for a variable name in Java?
   a. identifier & keyword
   b. identifier
   c. Keyword
   d. none of the mentioned
122. What is the extension of java code files?
   a. .js
   b. .txt
   c. .class
   d. .java
123. Which of the following is not an OOPS concept in Java?
   a. Polymorphism
   b. Inheritance
   c. Compilation
   d. Encapsulation
124. When an array is passed to the method, what does the method receive?
   a. The reference of the array
   b. A copy of the array
   c. Length of the array
   d. Copy of the first element
125. Number of primitive data types in Java are?
   a. 6
   b. 7
   c. 8
   d. 9

Descriptive Questions

UNIT 1

5 Marks Questions

1. Explain different types of java applications?
2. Write different platforms /Editions of Java?
3. Write and explain different components of Java Architecture?
4. Write and explain different types of Java variables?
5. Define constants in Java? Write a syntax for declaring constants? Write rules to be followed to declare a constants in Java?
6. Explain different Data types available in Java?
7. Explain Java Input and Output statements in Java?
8. Write a short note parameters and arguments which is used in Java methods?
9. Define scope? Explain different types of Java Scope?
10. Explain Java Type Casting with example?
11. Write different String methods of Java with example.
12. Write different String methods of Java with example.
13. Write different Character methods of Java with example.
14. Write different Array methods of Java with example

10 Marks Questions

1. Explain features of Java?
2. Write difference between C++ and Java.
3. Explain different types of operators in Java?
4. Write a difference between print(), printf(), println() statements in Java with example?
5. Explain different conditional statements of Java?
6. Explain Looping statements in Java?
7. Define Java Methods? How to create and call a methods in Java. Explain with example.
8. Explain different built in methods in Java?

Unit 2

5 Marks Questions

1. Explain two methods for creating String Objects in Java.
2. Explain the following methods
    a. toUpperCase() and toLowerCase()
    b. indexOf()
    c. length()
3. Explain String Immutability with example?
4. Write a Java program to read and display the array elements in order.
5. Explain byte stream class in detail.
6. Explain Character stream class in detail.

7. Explain Buffered Reader Class with programming example.
8. Define an array. How do you declare and create array objects?
9. Explain how arrays are created in Java? How are array elements accessed?

10 marks Questions

1. Define Array? Explain the following
    a. Access the Elements of an Array
    b. Change an Array Element
    c. Finding Array Length
    d. Loop Through an Array
2. Why String Buffer Classes are used in Java. Explain different methods of String Buffer classes.
3. What is a Scanner class? Explain with an programming example
4. Explain Byte stream and Character stream in java with programming example.
5. Write a note on Reading/Writing from console and files in Java

Unit 3

5 Marks Questions

1. Write a syntax to create multiple classes and multiple objects with an example.
2. Explain Java constructor with example.
3. Explain method overloading in java with example.
4. Explain Final classes with example.
5. Explain different ways to find the unreferenced objects in java.

10 marks Questions

1. Define a class and object. Write syntax to create class and object with an example.
2. Describe access control specifiers with examples.
3. Explain the following
    a. Declaration of Class
    b. Declaration of Instance Variables
    c. Declaration of Methods
4. Explain the following access modifiers
    a. Private
    b. Default
    c. Public
    d. Protected
5. Write a note on Garbage collections in Java. Explain finalize() and gc() methods in Java

Unit 4

5 Marks Questions

1. Explain the concept of Inheritance in Java with example.
2. Explain Abstract Classes with example.
3. What is Abstract Methods. Write a characteristics of Abstract methods.
4. What is an interface? List the rules to create an interface in java with example
5. Explain the following
    a. Import a class
    b. Import a Package
6. What is the package? Explain how to create user defined package in java with example.
7. Explain how interfaces are defined and implemented.
8. Explain Java Built in Packages with example.
9. What is wrapper classes and how to create a wrapper objects in Java. Explain
10. Explain the concept of Autoboxing and Unboxing in Java.
11. Define Annotation. Write a uses of Annotations.
12. Explain Syntax of Annotations with example.
13. Explain Enumerations in Java with an example

10 marks Questions

1. Describe Inheritance in java with example and also explain different types of Inheritance?
2. Explain the following with Programming example
    a. Abstract Classes
    b. Abstract Methods
3. Define packages. Explain different types of java packages.
4. Explain Enumerations and Annotations in java.

Unit 5

5 Marks Questions

1. What is a Java Exception. Explain types of exception
2. Write Java Exception Keywords.
3. Explain try, catch statements with an example.
4. Write a difference between throw and throws statements in java with example.
5. Explain three constant variables of java threads
6. Define Java Networking? Explain TCP/IP and Datagram Protocols

10 marks Questions

1. Explain Exception handling statements with example.
2. Explain the following
    a. try
    b. catch
    c. Finally

d. throw
e. throws

3. Define multithreading? Explain two mechanisms to create a threads in java.
4. Explain Get and Set methods in Thread priority with an example.
5. Define Thread **S**ynchronization. Explain two types of thread **S**ynchronization.
6. Explain different Java Networking terminologies.
7. Write a note on Java JDBC.

Unit 6

5 marks Questions

1. Define Java Applet? Explain types of Applets.
2. Write an advantages and disadvantages of Applets.
3. Define events? Explain two types of events.
4. Define Java AWT Controls? Write its UI Elements.
5. Write a difference between Java AWT and Java Swing.
6. Explain Java Servlets

10 Marks Questions

1. How to run an Applet , explain two ways with example.
2. Write different methods of Java graphics classes.
3. Define Event handler? Explain Delegation Event model. Write different Adapter classes and its Listener Interfaces.
4. Explain different UI Elements and its syntax.