

Dr. D Y Patil School Of MCA

MCA-1(2020-21)

Java Programming (MCQ)

Course Code: IT-11

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1. An overloaded method consists of,

- (a) The same method name with different types of parameters
- (b) The same method name with different number of parameters
- (c) The same method name and same number and type of parameters with different return type
- (d) Both (a) and (b) above**
- (e) (a), (b) and (c) above.

2. which of the following statements are true in java language.

- i) String class is an immutable class
 - ii) StringBuffer class is mutable class.
 - iii) StringBuilder class is mutable class.
 - iv) A StringBuffer is synchronized while a StringBuilder is not synchronized.
- A) i and ii only
- B) ii and iii only

C) ii and iv only

D) i, ii, iii and iv

3. The concept of multiple inheritances is implemented in Java by

A) extending two or more classes

B) extending one class and implementing one or more interfaces

C) implementing two or more interfaces

D) both B and C

4. Which one of the following is not true about abstract class in java?

(a) A class containing abstract methods is called an abstract class.

(b) Abstract methods should be implemented in the derived class.

(c) An abstract class cannot have non-abstract methods.

(d) A class must be qualified as 'abstract' class, if it contains one abstract method.

(e) None of the above.

5. Which of the following is true about the anonymous inner class?

A) It has only methods

B) Objects can't be created

C) It has a fixed class name

D) It has no class name

6. Which statement is not true about the java access modifiers?

(a) A public member of a class can be accessed in all the packages.

(b) A private member of a class cannot be accessed by the methods of the same class.

(c) A private member of a class cannot be accessed from its derived class.

(d) A protected member of a class can be accessed from its derived class.

(e) None of the above.

7. Which of the following is true about finally block ?

(a) A finally block is executed before the catch block but after the try block.

(b) A finally block is executed, only after the catch block is executed.

(c) A finally block is executed whether an exception is thrown or not.

(d) A finally block is executed, only if an exception occurs.

(e) None of the above.

8. A constructor...

(a) Must have the same name as the class it is declared within.

(b) Is used to create objects.

(c) May be declared private

(d) Both (A) and (B) above

(e) (a), (b) and (c) above.

9. Which of the following is not true about interface?

- (a) An interface can extend another interface.
- (b) A class which is implementing an interface must implement all the methods of the interface.
- (c) An interface can implement another interface.**
- (d) An interface is a solution for multiple inheritance in java.
- (e) None of the above.

10. The java run time system automatically calls this method while garbage collection.

- (a) finalizer()
- (b) finalize()**
- (c) finally()
- (d) finalized()
- (e) none of the above.

11. The use of a protected keyword to a member in a class will restrict its visibility as follows:

- A) Visible only in the class and its subclass in the same package.
- B) Visible only inside the same package.
- C) Visible in all classes in the same package and subclasses in other packages**
- D) Visible only in the class where it is declared.

12. Consider the following code.

```
int number[ ]=new int[5];
```

After execution of this statement which of the following are true.

i) number [0] is undefined ii) number[5] is undefined

iii) number [4] is null iv) number.length() is 5

A) i and ii only

B) ii and iii only

C) ii and iv only

D) i and iv only

13. Which of the below related to the portability and security of Java?

A) Bytecode is executed by JVM

B) The applet makes the Java code secure and portable

C) Use of exception handling

D) Dynamic binding between objects

14) The correct order of the declarations in a Java program is,

(a) Package declaration, import statement, class declaration

- (b) Import statement, package declaration, class declaration
- (c) Import statement, class declaration, package declaration
- (d) Class declaration, import statement, package declaration
- (e) Class declaration, package declaration, import statement.

15. Which of these classes are the direct subclasses of the Throwable class?

RuntimeException and Error class

Exception and VirtualMachineError class

Error and Exception class

IOException and VirtualMachineError class

16) Keyword is always a reference to the object.

new

this

invoke

class

17) The fields in an interface are implicitly specified as,

(a) static only

(b) protected

(c) private

(d) both static and final

(e) none of the above.

18) All exception types are subclasses of the built-in class

(a) Exception

(b) RuntimeException

(c) Error

(d) Throwable

(e) None of the above.

19. Which of these access specifiers can be used for a class so that it's members can be accessed by a different class in the different package?

A. **Public**

B. Protected

C. Private

D. No Modifier

20) What should be the execution order, if a class has a method, static block, instance block, and constructor, as shown below?

```
public class First_C {  
    public void myMethod()  
    {  
        System.out.println("Method");  
    }  
}
```

```

{
System.out.println(" Instance Block");
}

public void First_C()
{
System.out.println("Constructor ");
}
static {
    System.out.println("static block");
}
public static void main(String[] args) {
First_C c = new First_C();
c.First_C();
c.myMethod();
}
}

```

- a. Instance block, method, static block, and constructor
- b. Method, constructor, instance block, and static block
- c. Static block, method, instance block, and constructor
- d. Static block, instance block, constructor, and method**

21) _____ is used to find and fix bugs in the Java programs.

- a. JVM
- b. JRE
- c. JDK
- d. JDB**

22) Which of the following is an immediate subclass of the Panel class?

a. A. Applet class

- b. Window class
- c. Frame class
- d. Dialog class

23) In which memory a String is stored, when we create a string using **new** operator?

- a. Stack
- b. String memory
- c. Heap memory**
- d. Random storage space

24) Which keyword is used for accessing the features of a package?

- a. package
- b. import**
- c. extends
- d. export

25) What will be the output of the following program?

```
1. public class Test2 {  
2.   public static void main(String[] args) {  
3.     StringBuffer s1 = new StringBuffer("Complete");  
4.     s1.setCharAt(1,'i');  
5.     s1.setCharAt(7,'d');  
6.     System.out.println(s1);  
7.   }  
8. }
```

1. Complete
2. Iomplede
- 3. Cimpletd**
4. Coipletd

26) How many threads can be executed at a time?

- a. Only one thread
- b. Multiple threads**
- c. Only main (main() method) thread
- d. Two threads

27) If a thread goes to sleep

- a. It releases all the locks it has.
- b. It does not release any locks.**
- c. It releases half of its locks.
- d. It releases all of its lock except one.

28) In java a thread can be created by

- Extending the thread class
- Implementing Runnable interface.
- Both of the above**
- None of these

29) What are the features of an Object Oriented Programming (OOPs)?

- A) Inheritance
- B) Encapsulation

- C) Polymorphism
- D) All the above**

30) What are the features reused using Inheritance in Java?

- A) Methods
- B) Variables
- C) Constants
- D) All the above**

31) In a Multi-Level Inheritance in Java, the last subclass inherits methods and properties of ____.

- A) Only one immediate Superclass
- B) Few classes above it.
- C) All classes above it**
- D) None

32) Which is the keyword used to implement inheritance in Java?

- A) extends**
- B) implements
- C) instanceof
- D) None

33) What is method overriding in Java?

- A) Writing a method in a subclass with the same name of superclass's method
- B) Mentioning the same return type of the method of the superclass
- C) The argument list in the method of subclass and the method of superclass should be the same
- D) All the above**

34) What are the advantages of Method Overriding in Java?

- A) A subclass can add extra functionality to the overriding method.
- B) A subclass can call both the overridden method and overriding method.
- C) It supports polymorphism. A superclass reference can be used to call the common method of all subclasses.
- D) All the above**

35) A Java constructor is like a method without ____.

- A) statements
- B) return type**
- C) argument list
- D) None

36. Which of these is a super class of all exceptional type classes?

- a) String
- b) RuntimeExceptions
- c) Throwable**
- d) Exception

37. Which of these class is related to all the exceptions that can be caught by using catch?

- a) Error
- b) Exception**
- c) RuntimeExecption
- d) All of the mentioned

38. What will be the output of the following Java code?

```
1.    class multithreaded_programing
2.    {
```

```
3.      public static void main(String args[])
4.      {
5.          Thread t = Thread.currentThread();
6.          System.out.println(t);
7.      }
8.  }
```

- a) Thread[5,main]
- b) Thread[main,5]
- c) Thread[main,0]
- d) Thread[main,5,main]**

39. What decides thread priority?

- a) Process
- b) Process scheduler
- c) Thread
- d) Thread scheduler**

40. What is true about threading?

- a) run() method calls start() method and runs the code
- b) run() method creates new thread
- c) run() method can be called directly without start() method being called
- d) start() method creates new thread and calls code written in run() method**

41. Which of the following is a correct constructor for thread?

- a) Thread(Runnable a, String str)**
- b) Thread(int priority)
- c) Thread(Runnable a, int priority)
- d) Thread(Runnable a, ThreadGroup t)

42. Which of these method of Thread class is used to Suspend a thread for a period of time?

- a) **sleep()**
- b) terminate()
- c) suspend()
- d) stop()

43. Which of this method is used to find out that a thread is still running or not?

- a) **isAlive()**
- b) Join()
- c) isRunning()
- d) Alive()

44. What will be the output of the following Java code?

```
1.      class multithreaded_programing
2.      {
3.          public static void main(String args[])
4.          {
5.              Thread t = Thread.currentThread();
6.              t.setName("New Thread");
7.              System.out.println(t);
8.          }
9.      }
```

- a) Thread[5,main]
- b) Thread[New Thread,5]
- c) Thread[main,5,main]
- d) **Thread[New Thread,5,main]**

45. Which of these keywords is used to generate an exception explicitly?

- a) try
- b) finally
- c) throw**
- d) catch

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

- a) finally
- b) catch
- c) finally & catch**
- d) none of the mentioned

47. Which of these exceptions handles the divide by zero error?

- a) ArithmeticException**
- b) MathException
- c) IllegalAccessException
- d) IllegalException

48. Which of these keywords is used to define packages in Java?

- a) pkg
- b) Pkg
- c) package**
- d) Package

49. Which of the following is the correct way of importing an entire package 'pkg'?

- a) import pkg.
- b) Import pkg.
- c) import pkg.***
- d) Import pkg.*

50. Which of these keywords is used to define interfaces in Java?

- a) **interface**
- b) Interface
- c) intf
- d) Intf

51. Which of these access specifiers can be used for an interface?

- a) **Public**
- b) Protected
- c) private
- d) All of the mentioned

52. Which of the following is the correct way of implementing an interface A by class B?

- a) class B extends A{}
- b) **class B implements A{}**
- c) class B imports A{}
- d) None of the mentioned

53. What type of variable can be defined in an interface?

- a) public static
- b) private final
- c) public final
- d) **public static final**

54. What happens when a constructor is defined for an interface?

- a) **Compilation failure**
- b) Runtime Exception

- c) The interface compiles successfully
- d) The implementing class will throw exception

56. The minimum value of char type variable is

- A '\u0020'
- B '\u00ff'
- C '\u0010'
- D '\u0000'**

57. Java uses ____ to represent characters

- A ASCII code
- B Unicode**
- C Bytecode
- D none of the above

58. Java programs are.....

- A Platform-dependent
- B Interpreter-dependent
- C Platform-independent**
- D Interpreter-independent

59. Which is true? (Choose all that apply.)

- A. "X extends Y" is correct if and only if X is a class and Y is an interface
- B. "X extends Y" is correct if and only if X is an interface and Y is a class
- C. "X extends Y" is correct if X and Y are either both classes or both interfaces**
- D. "X extends Y" is correct for all combinations of X and Y being classes and/or interfaces

60. Which of these exception is thrown in cases when the file specified for writing is not found?

- a) IOException
- b) FileNotFoundException
- c) FileNotFoundException**
- d) FileInputException

61. Which of these values is returned by read() method is end of file (EOF) is encountered?

- a) 0
- b) 1
- c) -1**
- d) Null

62. Which of these methods is used to write() into a file?

- a) put()
- b) putFile()
- c) write()**
- d) writeFile()

63. Which of these packages contain classes and interfaces used for input & output operations of a program?

- a) java.util
- b) java.lang
- c) java.io**
- d) all of the mentioned

64. Which of the following is not OOPS concept in Java?

- a) Inheritance

- b) Encapsulation
- c) Polymorphism
- d) Compilation**

65. Which of the following is a type of polymorphism in Java?

- a) Compile time polymorphism**
- b) Execution time polymorphism
- c) Multiple polymorphism
- d) Multilevel polymorphism

66. When does method overloading is determined?

- a) At run time
- b) At compile time**
- c) At coding time
- d) At execution time

67. When Overloading does not occur?

- a) More than one method with same name but different method signature and different number or type of parameters
- b) More than one method with same name, same signature but different number of signature
- c) More than one method with same name, same signature, same number of parameters but different type
- d) More than one method with same name, same number of parameters and type but different signature**

68. Which concept of Java is a way of converting real world objects in terms of class?

- a) Polymorphism
- b) Encapsulation

c) Abstraction

d) Inheritance

69. Which concept of Java is achieved by combining methods and attribute into a class?

a) Encapsulation

b) Inheritance

c) Polymorphism

d) Abstraction

70. What is the return type of Constructors?

a) int

b) float

c) void

d) none of the mentioned

71. Which keyword is used by the method to refer to the object that invoked it?

a) import

b) catch

c) abstract

d) this

72. Which of the following is a method having same name as that of its class?

a) finalize

b) delete

c) class

d) constructor

73. 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**

74. Which function is used to perform some action when the object is to be destroyed?

- a) finalize()**
- b) delete()
- c) main()
- d) none of the mentioned

75. Which of these operators is used to allocate memory to array variable in Java?

- a) malloc
- b) alloc
- c) new**
- d) new malloc

76. Which of these is an incorrect array declaration?

- a) `int arr[] = new int[5]`
- b) `int [] arr = new int[5]`
- c) `int arr[] = new int[5]`
- d) `int arr[] = int [5] new`**

77. Which of these is an incorrect Statement?

- a) It is necessary to use new operator to initialize an array**
- b) Array can be initialized using comma separated expressions surrounded

by curly braces

- c) Array can be initialized when they are declared
- d) None of the mentioned

78. Which of this method can be used to make the main thread to be executed last among all the threads?

- a) stop()
- b) sleep()**
- c) join()
- d) call()

79. What is the default value of priority variable MIN_PRIORITY AND MAX_PRIORITY?

- a) 0 & 256
- b) 0 & 1**
- c) 1 & 10
- d) 1 & 256

80. Which of these method waits for the thread to terminate?

- a) sleep()
- b) isAlive()
- c) join()**
- d) stop()

81. Which of these packages contains all the classes and methods required for even handling in Java?

- a) java.applet
- b) java.awt
- c) java.event
- d) java.awt.event**

82. 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 event

83. Which of these methods are used to register a keyboard event listener?

- a) KeyListener()
- b) addKistener()
- c) **addKeyListener()**
- d) eventKeyboardListener()

84. Which of these methods are used to register a mouse motion listener?

- a) addMouse()
- b) addMouseListener()
- c) **addMouseMotionListner()**
- d) eventMouseMotionListener()

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

- a) A listener is a variable that is notified when an event occurs
- b) **A listener is a object 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

86. Which of these class contains the methods used to write in a file?

- a) FileStream
- b) **FileInputStream**

- c) `BufferedOutputStream`
- d) `FileBufferStream`

87. Which of these methods are used to read in from file?

- a) `get()`
- b) `read()`**
- c) `scan()`
- d) `readFileInput()`

88. 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

89. Which of these keywords are used to define an abstract class?

- a) `abst`
- b) `abstract`**
- c) `Abstract`
- d) `abstract class`

90. If a class inheriting an abstract class does not define all of its function then it will be known as?

- a) `Abstract class`**
- b) A simple class
- c) Static class
- d) None of the mentioned

91. Which of these is not a correct statement?

- a) Every class containing abstract method must be declared abstract
- b) Abstract class defines only the structure of the class not its implementation
- c) Abstract class can be initiated by new operator**
- d) Abstract class can be inherited

92. Which of this keyword can be used in a subclass to call the constructor of superclass?

- a) super**
- b) this
- c) extent
- d) extends

93. What is the process of defining a method in a subclass having same name & type signature as a method in its superclass?

- a) Method overloading
- b) Method overriding**
- c) Method hiding
- d) None of the mentioned

94. Which of these is correct way of calling a constructor having no parameters, of superclass A by subclass B?

- a) super(void);
- b) superclass.();
- c) super.A();
- d) super();**

95. Which of these is supported by method overriding in Java?

- a) Abstraction

- b) Encapsulation
- c) Polymorphism**
- d) None of the mentioned

96. Which of these method of class String is used to compare two String objects for their equality?

- a) equals()**
- b) Equals()
- c) isequal()
- d) lsequal()

97. Which of these data type value is returned by equals() method of String class?

- a) char
- b) int
- c) boolean**
- d) all of the mentioned

98. Which of the following keywords is used for throwing exception manually?

- a) finally
- b) try
- c) throw**
- d) catch

99. Which of the following keyword is used by calling function to handle exception thrown by called function?

- a) throws**
- b) throw

- c) try
- d) catch

100. Which part of code gets executed whether exception is caught or not?

a) finally

- b) try
- c) catch
- d) throw

101. Which of these keywords is used to define interfaces in Java?

a) interface

- b) Interface
- c) intf
- d) Intf

102) Which is the container that doesn't contain title bar and MenuBars but it can have other components like button, textfield etc?

- a. Window
- b. Frame
- c. Panel**
- d. Container

103) Give the abbreviation of AWT?

- a. Applet Windowing Toolkit
- b. Abstract Windowing Toolkit**
- c. Absolute Windowing Toolkit
- d. None of the above

**104) Which class is used for this Processing Method
processActionEvent()?**

- a. Button,List,MenuItem**
- b. Button,Checkbox,Choice
- c. Scrollbar,Component,Button
- d. None of the above

105) Which method can set or change the text in a Label?

- a. setText()
- b. getText()**
- c. All the above
- d. None of the above

**106) Which is a component in AWT that can contain another
components like buttons, textfields, labels etc.?**

- a. Window
- b. Container**
- c. Panel
- d. Frame

107) The Following steps are required to perform

- 1) Implement the Listener interface and overrides its methods**
- 2) Register the component with the Listener**

- a. Exception Handling
- b. String Handling
- c. Event Handling**
- d. None of the above

109) Where are the following four methods commonly used?

- 1) public void add(Component c)**
- 2) public void setSize(int width,int height)**
- 3) public void setLayout(LayoutManager m)**
- 4) public void setVisible(boolean)**

- a. Graphics class**
- b. Component class**
- c. Both A & B**
- d. None of the above**

110) Which keyword is used for the block to handle the exceptions generated by try block?

- a. Catch**
- b. Final**
- c. throw**
- d. try**

