

**Mumbai Educational Trust  
Institute of Information Technology  
Core Java**

1. How many objects and reference variables are created by the following lines of code?

```
Employee emp1, emp2, emp3, emp4;  
emp1 = new Employee() ;  
emp3 = new Employee() ;
```

a Two objects and three reference variables

b Three objects and two reference variables

c Four objects and two reference variables

**d Two objects and two reference variables**

2. What happens in a method if an unchecked exception is thrown in a try block and there is no matching catch block?

A: The program ignores the exception

B: The program halts immediately

C: The method throws the exception to its caller

**D: This is not legal, so the program will not compile**

3. Which of the following statements about abstract classes in Java are true?

1. An abstract class cannot be instantiated.

2. Constructors cannot be abstract.

3. A subclass of an abstract class must defined the abstract methods.

4. Static methods may be declared abstract.

A: Line 1, line 2 and line 3 only

B: Line 1 only

**C: Line 1 and line 2 only**

D: Line 2 only

4. Which constructs an anonymous inner class instance?

a Runnable r = new Runnable() { };

b Runnable r = new Runnable(public void run() { });

c Runnable r = new Runnable { public void run(){}};

**d System.out.println(new Runnable() {public void run() { }});**

5. Which statement is true about a static nested class?

a You must have a reference to an instance of the enclosing class in order to instantiate it.

**b It does not have access to nonstatic members of the enclosing class.**

c It's variables and methods must be static.

d It must extend the enclosing class.

6. Which keyword can protect a class in a package from accessibility by the classes outside the package?

a. private

**b. don't use any keyword at all (make it default)**

c. protected

d. final

7. The class java.lang .Exception is

a. protected

**b. extends Throwable**

c. implements Throwable

d. serializable

8. What happens in a method if an unchecked exception is thrown in a try block and there is no matching catch block?

a The program ignores the exception

**b The program halts immediately**

c The method throws the exception to its caller

d This is not legal, so the program will not compile

9. When Exceptions in Java does arise in code sequence?

- a. **Run Time**
- b. Compilation Time
- c. Can Occur Any Time
- d. None of the mentioned

10. Which of these keywords is used to manually throw an exception?

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

11. Which of the following is not a method of the Thread Class?

- a. public void run()
- b. public void start()
- c. public void exit()
- d. public final int getPriority()

Answer c

12. Which of the methods should be implemented if any class implements the Runnable interface?

- a. start()
- b. run()
- c. wait()
- d. **notify() and notifyAll()**

13. What is synchronization in reference to a thread?

**a. It's a process of handling situations when two or more threads need access to a shared resource.**

- b. Its a process by which many thread are able to access same shared resource simultaneously.
- c. Its a process by which a method is able to access many different threads simultaneously.
- d. Its a method that allow to many threads to access any information require.

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

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

15. What is the size of float and double in java?

- a. **32 and 64**
- b. 32 and 32
- c. 64 and 64
- d. 64 and 32

Answer a

16. When an array is passed to a 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 first element

17. When is the object created with new keyword?

- a. At compile time
- b. At runtime
- c. Depends on the code
- d. **None**

18. Identify the corrected definition of a package.

- a. A package is a collection of editing tools
- b. A package is a collection of classes and interfaces
- c. A package is a collection of classes
- d. A package is a collection of interfaces

Answer b

19. Identify the keyword among the following that makes a variable belong to a class, rather than being defined for each instance of the class.

- a final
- b **static**
- c volatile
- d abstract

20. In which of the following is toString() method defined?

- a **java.lang.Object**
- b java.lang.String
- c java.lang.util
- d None

21. What does the following string do to given string str1.

```
String str1 = "Interviewbit".replace('e','s');
```

- a. Replaces single occurrence of 'e' to 's'
- b. Replaces all occurrence of 'e' to 's'**
- c. Replaces single occurrence of 's' to 'e'
- d. None

22. Where does the system stores parameters and local variables whenever a method is invoked?

- a. Heap
- b. Stack**
- c. Array
- d. Tree

23. Identify the modifier which cannot be used for constructor.

- a. public
- b. static**
- c. protected
- d. private

24. What is the implicit return type of constructor?

- a. No return type
- b. A class object in which it is defined**
- c. void
- d. None

25. 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

26. Identify the infinite loop.

- a. for(;;)
- b. for(int i=0;i<1;i--)
- c. for(int i=0;;i--)
- d. All of above**

27. Where is System class defined?

- a. java.lang.package**
- b. java.util.package
- c. java.io.package
- d. None

28. Object-oriented inheritance models the

- a. "is a kind of" relationship**
- b. "has a" relationship
- c. "want to be" relationship
- d. inheritance does not describe any kind of relationship between classes
- d. "contains" of relationship.

29. In object-oriented programming, new classes can be defined by extending existing classes. This is an example of:

- a. Encapsulation
- b. Interface
- c. Composition
- d .Inheritance**

30. Which of the following events will cause a thread to die?

- a. The method sleep( ) is called
- b. The method wait( ) is called
- c. Execution of the start( ) method ends
- d. Execution of the run( ) method ends**

31. A protected member declared in a class is accessible to any \_\_\_\_\_.

- a. subclass**
- b. any subclass or a class in the current package.
- c. class in the current package
- d. None of the above

32. Given threads t1 and t2. In its run method t1 executes t2.join(), \_\_\_\_\_ thread will be blocked.

- a. t1**
- b. t2
- c. main
- d. All of the above

33. The wait and notify methods are members of \_\_\_\_\_

- a. java.lang.Object**
- java.lang.Thread
- java.lang.Monitor
- All of the above

34. Public members of a non-public class are not accessible outside its package.

a. **TRUE**

b. FALSE

35. An interface cannot inherit from multiple interfaces.

a. TRUE

b. **FALSE**

36. Under Java, an organization of related classes is called a \_\_\_\_\_.

a. **Package**

b. namespace

c. Assembly

d. None of the above

37. All the fields of an interface are public static and \_\_\_\_\_ by default.

a. transient

b. **final**

c. None

d. Both of the above

38. The \_\_\_\_\_ keyword is used for making a block of code thread-safe.

a. sync

b. **synchronized**

c. using

d. None of the above

39. A class must implement \_\_\_\_\_ interface for customizing serialization of its objects.

a. java.lang.Object.Serializable

b. java.io.Enumerable

c. **java.io.Externalizable**

d. None of the above

40. Final key word can be applied to

a. Class

b. Field

c. method

d. **All of the above**

41. The \_\_\_\_\_ keyword is used for making a block of code thread-safe.

a. sync

b. **synchronized**

c. using

d. None of the above

42. A class must implement \_\_\_\_\_ interface for customizing serialization of its objects.

a. java.lang.Object.Serializable

b. java.io.Enumerable

c. **java.io.Externalizable**

d. None of the above

43. Final key word can be applied to

a. Class

b. Field

c. method

d. **All of the above**

44. To apply static binding on methods use \_\_\_\_\_ modifier to methods

a. **Final**

b. virtual

c. static

d. None of the above

45. To check object identity we can use \_\_\_\_\_

a. **=**

b. instanceof

c. **==**

d. None of the above

46. Finalize, Final, Finally, out of this following is used in exception handling

a. **Finally**

b. Final

c. Finalize

d. None of the above

47. Checked Exception are checked at \_\_\_\_\_

a. **Compile time**

b. Runtime

c. Both

d. None of the above

48. Checked Exceptions are inherited from Exception

a. **Throwable**

b. Runtime

c. Exception

d. None of the above

49. If an object need to release its resource automatically, then \_\_\_\_\_

a. You have call finalize on object

b. You have to call close on object

c. **Object has to implement Autocloseable**

d. All of the above

50. Functional Interfaces are \_\_\_\_\_

- a. **Interfaces which have only one abstract method**
- b. Interfaces which have only one implemented method
- c. Interfaces which have only one implemented method and one abstract method
- d. None of the above

51. To create thread, Thread constructor has to be passed

- a. Object of class which implements Runnable
- b. Lambda Expression
- c. Anonymous which implements Runnable
- d. **All of the above**

52. Which of the following is not an access modifier in java?

- a. Public
- b. Protected
- c. **Default**
- d. None of the above

53. exception using throws clause is called as

- a. **Checked Exceptions**
- b. Unchecked Exceptions
- c. Both I and 2
- d. None of the above

54. Is there any limit to the length of an identifier?

- a. No
- b. **Yes, 65535 characters is the maximum length**
- c. Yes
- d. None of the above

55. Can we reference the implicit instance variable this from within a class method?

- a. **Yes**
- b. Yes but only in case of abstract class
- c. No
- d. None of the above

56. Which package by default included in java application?

- a. util
- b. Io
- c. **Lang**
- d. applet

57. class B extends A and B overrides the dostuff() method inherited from A. which method will get called if you say

```
A ob= new B();  
ob.dostuff();
```

- a. **dostuff() of B**
- b. dostuff() of A
- c. There will be ambiguity
- d. None of the above

58. String s1="hello"; String s2="hello"; which one will return true?

- a. s1 == s2
- b. **s1.equals(s2)**
- c. Both I and 2
- d. None of the above

59. What should be done to execute a thread for an object derived from the Thread class?

- 1. The run() method should be directly invoked on the Object.
- 2. **The start() method should be directly invoked on the Object.**
- 3. The init() method should be directly invoked on the Object.
- 4. The creation of the object using the new operator would create a new thread and invoke its run() method.

60. Can we override the equals method or clone method from a class Object to take a parameter or return a value of the type that we specify?

- a. No
- b. **No, we can override a method from a superclass only if our subclass's method has the same signature and return type.**
- c. Yes
- d. None of the above

61. Which of the following statement is false?

1. The super keyword works hand in hand with inheritance.
2. Inheritance gives a class implicit access to its super classes.
- 3. The super keyword is not essential to the workings of constructors.**
4. The automatic default constructor has no parameter.

62.

```
class DAC {  
    public static void main(String[] s) {  
        String s1 ="A", s2 = " B ", s3 = "C";  
        s2.trim();  
        s3.concat("D");  
        System.out.print(s1+s2+s3);  
    }  
}
```

What is the Result Of the Program?

- a. Prints: ABC                      **b. Prints: A B C**                      c. Prints: ABCD                      d. Prints: ABDC

63.Inner Class cannot Declare \_\_\_\_\_ variables

- a. Static**                      b. Protected                      c. Final                      d. Transient

64. A: Entries are Organized as key/value pairs

B: Duplicate entries replace old entries

Which interface of java.util package offer the specialized behaviour?

- a. List                      **b. Map**                      c. Set                      d. None of The Above

65. Which type of variables cannot be serialized?

- a.Transient**                      b.Final                      c.Private                      d.None of the Above

66.Class CDAC {

```
    public static void main(String[] args){  
        StringBuffer sb1=new StringBuffer("ABC");  
        StringBuffer sb2=new StringBuffer("ABC");  
        System.out.print("Prints:"+(sb1==sb2)+","+"sb1.equals(sb2));  
    }  
}
```

What is the result of attempting to compile and run the program?

- a.Prints: false, true                      **b.Prints: false, false**                      c.Prints: true, false                      d.Prints: true, true

67.Which method must be defined by a class implementing the java. lang.Runnable interface?

- a. void run()**                      b. public void run()                      c. public void start()                      d. void run(int priority)

68.Which modifier is used to stop overriding a method?

- a. final**                      b. Static                      c. Abstract                      d. None of the above