1) Which of the following class definitions defines a legal abstract class?

a) class A { abstract void unfinished() { } }

b) class A { abstract void unfinished(); }

**c) abstract class A { abstract void unfinished(); }**

d) public class abstract A { abstract void unfinished(); }

2) Which of the following declares an abstract method in an abstract Java class?

a) public abstract method();

**b) public abstract void method();**

c) public void method() {}

d) public void abstract Method()

3) Which of the following statements regarding abstract classes are true?

a) An abstract class can be extended.

b) A subclass of a non-abstract superclass can be abstract.

c) A subclass can override a concrete method in a superclass to declare it abstract.

**d) All of the above**

4) Determine output of the following code.

interface A { }

class C { }

class D extends C { }

class B extends D implements A { }

public class Test extends Thread{

public static void main(String[] args){

B b = new B();

if (b instanceof A)

System.out.println("b is an instance of A");

if (b instanceof C)

System.out.println("b is an instance of C");

}

}

a) Nothing.

b) b is an instance of A.

c) b is an instance of C.

**d) b is an instance of A followed by b is an instance of C.**

5)In Java, declaring a class abstract is useful

a) To prevent developers from further extending the class.

**b) When it doesn't make sense to have objects of that class.**

c) When default implementations of some methods are not desirable.

d) To force developers to extend the class not to use its capabilities.

6) What is the output for the below code ?

interface A{

public void printValue();

}

public class Test{

public static void main (String[] args){

A a1 = new A(){

public void printValue(){

System.out.println("A");

}

};

a1.printValue();

}

}

a) Compilation fails due to an error on line 3

**b) A**

c) Compilation fails due to an error on line 8

d) null

7) What will be the output?

public interface InfA{

protected String getName();

}

public class Test implements InfA{

public String getName(){

return "test-name";

}

public static void main (String[] args){

Test t = new Test();

System.out.println(t.getName());

}

}

a) test-name

b) Compilation fails due to an error on lines 1

**c) Compilation fails due to an error on lines 2**

d) Compilation succeed but Runtime Exception

8) What will be the output for the below code ?

public interface TestInf{

int i =10;

}

public class Test{

public static void main(String... args){

TestInf.i=12;

System.out.println(TestInf.i);

}

}

**a) Compile with error**

b) 10

c) 12

d) Runtime Exception

9) A class which is declared with the \_\_\_\_\_\_\_\_ keyword is known as an abstract class in Java.

**a) abstract**

b) util

c) extends

d) None of the above

10) Abstract class can have constructors and static methods?

**a) TRUE**

b) FALSE

c) Abstract class can have constructors but can not have static methods.

d) Abstract class can not have constructors but can have static methods.

11)What is the syntax of abstract class in java?

a) abstract A{}

b) abstract class A

**c) abstract class A{}**

d) abstract class A[]

12) Which of these packages contains abstract keyword?

**a) java.lang**

b) java.util

c) java.io

d) java.system

13)An abstract class can have a data member, abstract method, method body (non-abstract method), constructor, and even main() method.

**a) TRUE**

b) FALSE

c) Can be true or false

d) can not say

14)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

15)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

16)What will be the output of the following Java code?

class A

{

public int i;

private int j;

}

class B extends A

{

void display()

{

super.j = super.i + 1;

System.out.println(super.i + " " + super.j);

}

}

class inheritance

{

public static void main(String args[])

{

B obj = new B();

obj.i=1;

obj.j=2;

obj.display();

}

}

a) 2 2

b) 3 3

c) Runtime Error

**d) Compilation Error**

17) An abstract class with 100% abstract methods is equivalent to \_\_\_\_\_

a) Concrete class

b) Virtual Class

**c) Interface**

d) All the above

18) 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

19) Which of these access specifiers can be used for an interface?

**a) Public**

b) Protected

c) private

d) All of the mentioned

20) Which of these keywords is used by a class to use an interface defined previously?

a) import

b) Import

**c) implements**

d) Implements

21) Which of the following is the 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

22) A java interface can contain ————

a) public static Final Variables only

b) public Abstract methods

c) Abstract methods(unimplemented) and implemented methods both

**d) public static Final Variables and abstract methods both**

23) which of the following is true about methods in an interface in java?

**a) An interface can contain only abstract method.**

b) We can define a method in an interface

c) Private and protected access modifiers can also be used to declare methods in interface

d) None

24) Which one is correct declaration for implementing two interfaces?

Consider, Interface A and B. class C wants to implements both interfaces.

**a) class C implements A, B**

b) class C implements A, implements B

c) class C implements A extends B

25) What happens when we access the same variable defined in two interfaces implemented by the same class?

a) Compilation failure

b) Runtime Exception

c) The JVM is not able to identify the correct variable

**d) The interfaceName.variableName needs to be defined**

26) 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

27) What will happen if we provide concrete implementation of method in interface?

a) The concrete class implementing that method need not provide implementation of that method

b) Runtime exception is thrown

**c) Compilation failure**

d) Method not found exception is thrown

28) What does an interface contain?

a) Method definition

**b) Method declaration**

c) Method declaration and definition

d) Method name

29) An interface in Java is like a 100% \_\_\_\_.

**a) abstract class**

b) public class

c) inner class

d) anonymous class

30) What is the output of the below Java program with an Interface?

interface Car

{

int basePrice=1000;

}

public class InterfaceTest2 implements Car

{

void changePrice()

{

basePrice = 2000;

System.out.print(basePrice);

}

public static void main(String[] args)

{

new InterfaceTest2().changePrice();

}

}

a) 1000

b) 2000

**c) Compiler error**

d) None of the above