### ACTS CDAC Delhi, PG-DAC and PG-DBDA

**Practice Paper: Set 1** 

# Module Name Object Oriented Programming with Java

- 1. String is a wrapper class?
  - a. Yes
  - b. No
- 2. Which of the following is not correct?
  - a. int arrValues [][] = new int [20][20];
  - b. int arrValues [ ][ ] = new int [20][ ];
  - c. int [][] arrValues = new int [10][];
  - d. int [][] arrValues = new int [][20];
- 3. Which of the following are Java reserved words?
  - a. run
  - b. import
  - c. constant
  - d. implement
- 4. Which of the following features are common to both Java & C++?
  - a. The encapsulation of data & methods with in objects
  - b. The use of pointers
- 5. The ...... and ...... classes are abstract classes that support reading and writing of byte streams.
  - a. Reader, Writer
  - b. InputStream, OutputStream
  - c. ObjectInputStream, ObjectOutputStream
  - d. None
- 6. What is the error in the following code?

```
class Test
{
    abstract void display();
}
```

- a. No error
- b. Method display() should be declared as static
- c. Test class should be declared as abstract
- d. Test class should be declared as public

7.	Which of the following statements accurately describe the use of access modifiers within			
	class definition?			
	a. They can be applied to both data & methods			
	b. They can follow a class's data variables or methods			
	c. They must be applied to data variables first and then to methods.			
	d. None of the above			
8.	8. Which of the following class is thread safe?			
٠.	a. ArrayList			
	b. Hashtable			
	c. HashMap			
	d. HashSet			
9.	The concept of multiple inheritance 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			
	e. Multiple inheritance in Java is not supported			
10	Suppose a given instance variable has been declared private. Can this instance variable	la ha		
10. Suppose a given instance variable has been declared private. Can this instance variable be				

manipulated by methods outside its class?

11. Which of the following is not a wrapper class?

14. Identify the true statements about finalization.

c. Finalizer overloading is allowed

a. A class may have only one finalize methodb. Finalizers are mostly used with simple classes

12. Inner classes cannot declare \_\_\_\_\_\_ variables.

13. Because finalize () belongs to the java.lang.Object class, it is present in all \_\_\_\_.

a. Yesb. No

a. Stringb. Integerc. Characterd. Double

a. Staticb. Finalc. Transientd. Protected

a. Objectsb. Classesc. Methods

- 15. Which are keywords in Java?
  - a. NULL
  - b. sizeof
  - c. friend
  - d. synchronized
- 16. Which interface of the java.util package offer the specified behaviour?
  - 1) Entries are organised as key/value pairs.
  - 2) Duplicate entries replace old values.
  - a. List
  - b. Map
  - c. Set
  - d. None
- 17. Which of the following statements correctly describes an interface?
  - a. It's a concrete class
  - b. It's a type of super class
  - c. It's a pure abstract class
- 18. Which of the following types of class members can be part of the internal part of a class?
  - a. Public instance variables
  - b. Private instance variables
  - c. Public methods
  - d. Private Methods
  - e. All of the above
- 19. What is the output of the following program?

```
String s1 = "abc";
String s2 = "def";
String s3 = s1.concat(s2.toUpperCase( ) );
System.out.println(s1+s2+s3);
```

- a. abcdefabcdef
- b. abcabcDEFDEF
- c. abcdefabcDEF
- d. None of the Above
- 20. Which of the following statements are true?
  - A. The String class is implemented as a char array, elements are addressed using the stringname[] convention
  - B. Strings are a primitive type in Java that overloads the + operator for concatenation
  - C. Strings are a primitive type in Java and the StringBuffer is used as the matching wrapper type
  - D. The size of a string can be retrieved using the length property.
  - a. A & B
  - b. A & D

- c. B & D
- d. B&C

# 21. Which of the following are true?

- A. The InputStream and OutputStream classes are byte-oriented.
- B. The ObjectInputStream and ObjectOutputStream do not support serialized object input and output.
- C. The Reader and Writer classes are character-oriented.
- D. The Reader and Writer classes are the preferred solution to serialized object output.
- a. A & C
- b. B & C
- c. B & D
- d. A & D

## 22. Which of the following can you perform using the File class?

- a. Change the current directory
- b. Return the name of the parent directory
- c. Delete a file
- d. Find if a file contains text or binary information.
- e. All of the above

# 23. If a variable is declared final, it must include ...... value.

- a. integer
- b. no
- c. initial
- d. float

### 24. Methods can be overloaded with a difference only in the type of the return value.

- a. Yes
- b. No

#### 25. State true of false.

- A. Public can only be assigned to class
- B. Protected can be accessed within the same package
- C. Protected method is never accessible outside the package
- D. Friendly variable may be accessible outside class
- a. i-true, ii-true, iii-false, iv-true
- b. i-true, ii-false, iii-true, iv-false
- c. i-false, ii-true, iii-false, iv-false
- d. i-true, ii-false, iii-false, iv-true

### 26. How do you forcefully invoke the Garbage Collector in Java?

- a. System.gc()
- b. GC.collect()
- c. GC.invoke()
- d. You cannot invoke the Garbage Collector in Java

27.	Can a p	Can a programmer handle exceptions of the type java.lang.Error in Java?		
	a.	Yes		
	b.	No		
28.	. Functional Interfaces can contain multiple default methods but only 1 abstract method			
		True		
		False		
29.	•	ng.Exception is the root base class to all exceptions in Java		
		True		
	b.	False		
30.	. Which is a valid literal for an integer?			
	a.	1_00_000		
	b.	1,00,000		
	C.	1 00 000		
	d.	None of the above		
31. Choose the correct one about thread:				
	a.	The threads from one class ends at the same time		
	b.	when JVM exists the main method, it will stop only after all the threads include		
		daemon threads are stopped.		
	c.	if there are multiple threads, reading or writing of data of class is inconsistent.		
	d.	programmer has to write a special program for garbage collection in multiple threads.		
32. The call to wait and notify should be placed within a synchronized block				
		True		
	b.	False		
22	The on	tire object of a class can be marked as synchronized by preseding the class name with		
33. The entire object of a class can be marked as synchronized by preceding the class name with the synchronized keyword				
	a.	True		
	b.	False		
34.	Which	of the following can fill in the blank to make the code compile?		
	pu	blic class News<> { } 1. ? 2. News 3. Object		
	a.	None of them		
	b.	All of them		
		1		
	d.	2 & 3		
35.	We are	running a library. Patrons select books by name. They get at the back of the checkout		

line. When they get to the front, they scan the book's ISBN. The checkout system finds the book based on this number and marks the book as checked out. Of these choices, which data structures best represent the line to check out the book and the book lookup to mark it as checked out, respectively?

a. ArrayDequeue, TreeMap

- b. ArrayList, TreeSet c. ArrayDequeue, TreeSet d. ArrayList, TreeMap 36. Which is the first line to fail to compile? class Tool { void use() { } // r1} class Hammer extends Tool private void use() { } // r2 public void bang() { } // r3} a. r1 b. r2 c. r3 d. None 37. Fill in the blanks: It is possible to extend an \_\_\_\_\_\_but not an \_\_\_\_\_. a. interface, abstract class b. abstract class, enum c. enum, interface d. abstract class, interface 38. Annotation type definition looks similar to which of the following?
- 39. Can interfaces contain private methods?
  - a. Yes

a. Methodb. Interfacec. Classd. Field

- b. No
- 40. Which of the following are not pre-defined annotation in Java?
  - a. @Deprecated
  - b. @Override
  - c. @FunctionInterface
  - d. None of the above