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| **Name of the Participant:** | | |
| **Duration:90 mins** | **Questions** :40 | **Date:** |

*Assume all public classes are defined in separate java files, necessary APIs are imported and pieces of code are run in main method and JDK 1.8 is the version.*

**1. What is the output of the following :**

1 class StringCheck {

2 static String[] str=new String[50];

3 public static void main(String[] args) {

4 for(int i=0; i<str.length; i++) {

5 str[i] = i;

6 System.out.print(str[i]);

7 }

8 }

9 }

*a) compile error at line 5.*

*b) 0 to 49 printed continuously.*

*c) compile error at line 6.*

*d) null printed 50 times.*

**2. Java implements polymorphism by :**

1. keyword extends

2. function overriding

3. function overloading

4. keyword implements

*a) 1 and 4*

*b) 2 and 3*

*c) None of them*

*d) All of them*

**3. What is the output for the foll :**

public class Test {

public static void main(String [] args) {

short a, b, c=0;

a=1;

b=2;

c=a+b;

System.out.println(c);

}

}

*a) Compile error.*

*b) 3*

*c) 3.0*

*d) Runtime exception*

**4. What is the output :**

import java.io.IOException;

public class Test {

public Test () {

try {

m1();

System.out.println("No error");

}

catch (IOException e) {

System.out.println("IOException caught");

}

catch (Exception e) {

System.out.println("Exception caught");

}

}

public void m1() {

throw new IOException();

}

public static void main (String [] args) {

Test t = new Test();

}

}

*a) Compile error*

*b) IOException caught*

*c) Exception caught*

*d) No error*

**5. What is the ouput?**

import java.util.\*;

public class Test {

static int n=1;

static String s="2";

static {

System.out.print(n + " ");

}

public Test(){

n = 3;

}

public void printS() {

System.out.print(s + " ");

}

public static void main(String args[]) {

System.out.print("0 ");

Test t = new Test();

t.printS();

}

}

*a) 0 1 2*

*b) 3 0 2*

*c) 0 3 2*

*d) 1 0 2*

**6. Which are correct?**

a) int sum(int first, int second) { first + second; }

b) int sum(int first, int second) { return first + second; }

c) int sum(int first, second) { return first + second; }

d) sum(int first, int second) { return first + second; }

**7. What is the output?**

public class Test extends Thread

{

public static void main(String[] args) {

Thread t = new Thread(new Test());

t.start();

t.start();

System.out.println("main");

}

public void run() {

System.out.println("thread ");

}

}

*a) throws IllegalMonitorStateException at runtime*

*b) throws IllegalThreadStateException at runtime*

*c) Compile Error*

*d) output: thread thread main*

**8. What is the output?**

import java.util.\*;

public class Test {

public static void main(String args[]) {

Set s = new HashSet();

System.out.print(s.add("A"));

System.out.print(s.add("F"));

System.out.print(s.add("A"));

System.out.print(s.add("B"));

}

}

*a) truetruetruetrue*

*b) truetruefalsefalse*

*c) truefalsetruefalse*

*d) truetruefalsetrue*

**9. When using an ArrayList as implementation of List, what happens if adding an element exceeds the ArrayList's capacity?**

a) Throws ArrayIndexOutOfBoundsException

b) Error cannot be handled in code

c) ArrayList expands automatically to fit the addition

d) JVM terminates the application

**10. Which statement at XXX will give output of 10**

import java.io.IOException;

public class Test implements Runnable{

public int data;

public void run() {

try {

Thread.sleep(2000);

data = 10;

}

catch(InterruptedException e) { }

}

public static void main (String [] args) {

try {

Test a = new Test();

Thread t = new Thread(a);

t.start();

XXX

System.out.println(a.data);

}

catch(Exception e) { }

}}

*a) t.wait();*

*b) t.yield();*

*c) t.notify();*

*d) t.join();*

**11. For the code :**

public class Test {

int d;

public static void main(String[] args) {

Test t = null;

// A

System.out.print("Ok");

}

}

Which expression at A will throw a NullPointerException ?

*a) if(t==null || t.d>31).*

*b) if(t==null && t.d>31)*

*c) if(t!=null && t.d>31)*

*d) None of the above*

**12. The following code :**

public class Test {

public static void main(String[] args) {

if(5 & 7 > 0 && 5 | 7 < 0)

System.out.println("true");

}

}

*a) prints output true*

*b) no output*

*c) does not compile.*

*d) Run time exception*

**13. What is the output of the following :**

import java.io.\*;

class Test {

public static void main(String[] args) throws InterruptedException {

try {

Thread.sleep(1000);

System.out.println("try");

}

catch(IOException e) {

System.out.println("catch");

}

finally {

System.out.println("finally");

}

}

}

*a) try, finally*

*b) Compile error.*

*c) try*

*d) catch, finally*

**14. The following code**

class Test {

Test() throws Exception {

}

public static void main (String[] args) throws Exception {

Test t = new Test();

}

}

class Child extends Test {

}

*a) class Child will not compile.*

*b) both will not compile.*

*c) compiles and runs fine*

*d) class Test will not compile.*

**15. For the code :**

public class Test {

int age=25;

Test() {

}

public static void main(String[] args) {

System.out.println("Age = "+ ++age );

}

}

*a) Gives output : Age = 26*

*b) Will not compile.*

*c) Gives output : Age = 25*

*d) None of above*

**16. For the following code :**

public class Test {

static public void main(String args[]) {

int x = 10, y;

if(x < 10) y = 1;

if(x >= 10) y = 2;

System.out.println("y is " + (y--));

}

}

*a) Will not compile*

*b) Gives output : y is 1*

*c) Gives output : y is 2*

*d) Gives output : y is 0*

**17. Which two are valid constructors for Thread?**

1. Thread(Runnable r, String name)

2. Thread()

3. Thread(int priority)

4. Thread(Runnable r, ThreadGroup g)

5. Thread(Runnable r, int priority)

*a) 3 and 5*

*b) 2 and 3*

*c) 2 and 4*

*d) 1 and 2*

**18. What is output?**

int b = 3;

if ( !(b > 3)) {

System.out.print("square");

}{

System.out.print("circle");

}

System.out.println("...");

*a) Compile error*

*b) square...*

*c) circle...*

*d) squarecircle...*

**19. Which of following are true of a default constructor?**

A. The default constructor initializes method variables.

B. The compiler always creates a default constructor for every class.

C. The default constructor may invoke the parameterized constructor of the superclass.

D. The default constructor initializes the instance variables declared in the class.

E. When a class has only constructors with parameters, the compiler does not create a default constructor.

*a) D and E*

*b) B and D*

*c) B and E*

*d) C and D*

**20. For the following code :**

import java.util.ArrayList;

import java.util.List;

public class Test{

public static void main(String args[]) {

List<Integer> list = new ArrayList<Integer>();

list.add(0, 59);

int total = list.get(0);

System.out.println(total);

}

}

*a) Gives output : 0*

*b) Will not compile*

*c) Gives output : 59*

*d) Runtime Exception*

**21. The following code :**

public class Test{

public static void main(String args[]) {

B b = new B();

}

}

class A {

A() {

System.out.print("A");

}

}

class B extends A{

B() {

System.out.print("B");

}

}

*a) Gives output : BA*

*b) Gives output : AB*

*c) Gives output : B*

*d) Compile Error*

**22. Which expression can be placed at XX?**

int[] arr = {1,2,3,4,5};

int i=0;

for (XX) {

System.out.print("int ");

}

A. ; i < 5; i++

B. int i=0; i < 5; i++

C. ; i < 1;

D. int j: arr

*a) A, D*

*b) B*

*c) B, D*

*d) A, C, D*

**23. What is the output?**

String k ="big ";

k.concat("crowded ");

k += "city";

System.out.println(k);

*a) big crowded city*

*b) big city*

*c) big crowded*

*d) Compile error*

**24. What is output?**

public class Test {

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

new Test().doIt();

}

public void doIt() {

int n = 5;

doIt2();

System.out.println(n);

}

public void doIt2() {

int i,m=7;

System.out.print("m");

for (i = 0; i < 2; i++) {

System.out.print("["+i+","+m+"]");

}

}

}

*a) m[0,7][1,7]5*

*b) m[0,7][1,7][2,6]5*

*c) m5*

*d) Compile error*

**25. What is output?**

class Test {

void main() {

System.out.println("one");

}

static public void main(String args) {

System.out.println("two");

}

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

System.out.println("three");

}

void main(Object[] args) {

System.out.println("four");

}

}

*a) three*

*b) one two three four*

*c) three four*

*d) Compile error*

**26. What is ouput?**

class Test {

int m(double d) {

System.out.println("one");

return 0;

}

String m(double d) {

System.out.println("two");

return null;

}

double m(double d) {

System.out.println("three");

return 0.0;

}

public static void main(String[] args) {

new Test().m(4.0);

}

}

*a) three*

*b) two*

*c) one*

*d) Compile error*

**27. What is the output?**

public class Test {

public static void main (String [] args) {

StringBuffer a = new StringBuffer ("A");

StringBuffer b = new StringBuffer ("B");

change(a,b);

System.out.println(a+","+b);

}

static void change(StringBuffer x, StringBuffer y) {

y.append(x);

y = x;

}

}

*a) Compile error*

*b) A,B*

*c) A,A*

*d) A,BA*

**28. Which of the following are NOT true?**

1. C++ is Object Oriented

2. Java is OS independent

3. C is used in embedded systems

4. Java is not used as stand alone application

5. Java can be compiled to get an OS executable file

*a) 4 and 5*

*b) 3 and 4*

*c) 3 and 5*

*d) None of the above*

**29. What is the output?**

String s1 = new String("Happy");

String s2 = new String("Happy");

String s3 = "Happy";

String s4 = "Happy" ;

System.out.print( "s1==s2 :"+(s1==s2));

System.out.print( ", s3==s4 :"+(s3==s4));

*a) s1==s2 :true, s3==s4 :true*

*b) s1==s2 :false, s3==s4 :true*

*c) s1==s2 :true, s3==s4 :false*

*d) s1==s2 :false, s3==s4 :false*

**30. What is the output?**

String[][] names = {

{"Mr.", "Mrs.", "Ms."},

{"John", "Gupta", "Hegde", "Khan"},

{":M", ":F"}

};

System.out.println(names[0][2] + names[1][2]+ names[2][1]);

*a) Compile error*

*b) Mrs.Gupta : M*

*c) Ms.Hegde : F*

*d) Mr.Khan : M*

**31. Following program:**

public class Test {

public void printMe() {

try{

System.out.println("before");

wait(2000);

System.out.println("after");

}

catch(InterruptedException e){}

}

public static void main(String[] args) {

Test t = new Test();

t.printMe();

}

}

*a) Throws Exception during run time*

*b) Error during compilation*

*c) Gives output: before and after 2 seconds : after*

*d) None of above*

**32. Which of these demonstrate encapsulation of data?**

A. Member data have no access modifiers.

B. Member data can be modified directly.

C. The access modifier for methods is protected.

D. The access modifier to member data is private.

E. Methods provide for access and modification of data.

*a) A & D*

*b) C & E*

*c) D & E*

*d) B & E*

**33. Which interface does java.util.Hashtable implement?**

a) java.util.Map

b) java.util.List

c) java.util.Hashable

d) java.util.Collection

**34. Which are valid?**

A. Object array1[];

B. Boolean array2[3];

C. int[] array3;

D. Float[2] array4;

*a) All of them*

*b) A, B, C*

*c) B, D*

*d) A, C*

**35. Which are valid identifiers?**

A. false

B. default

C. \_object

D. a-class

E. synchronous

*a) C and E*

*b) C and D*

*c) B and C*

*d) D and E*

**36. Which are NOT TRUE of an interface?**

A. Cannot be instantiated

B. Does not have constructors

C. All methods are public and abstract

D. Fields are public, final and static

E. Can extend another interface

F. Can refer to an instance of its implemented class

*a) D and E*

*b) C and D*

*c) B and E*

*d) None of them*

**37. Which three are valid declarations of a float?**

A. float foo = -1;

B. float foo = 1.0;

C. float foo = 42e1;

D. float foo = 2.02f;

E. float foo = 3.03d;

F. float foo = 0x0123;

*a) B, D, F*

*b) A, B, D*

*c) A, D, F*

*d) A, D, E*

**38. Which are valid declarations of a char?**

A. char ch1 ="a";

B. char ch2 ='\'';

C. char ch3 ='cafe';

D. char ch4 ="cafe";

E. char ch5 = '\ucafe';

F. char ch6 ='\u0041';

G. char ch7 = (char)true;

*a) A, E, F*

*b) B, F, G*

*c) B, E, F*

*d) B, E, G*

**39. What is the output?**

import java.util.TreeSet;

public class Test {

public static void main (String [] args) {

TreeSet ss = new TreeSet();

ss.add("n");

ss.add("c");

ss.add("z");

ss.add("d");

ss.add("f");

ss.add("a");

ss.add("z");

System.out.println(ss);

}

}

*a) [n, c, d, f, a, z]*

*b) [n, c, z, d, f, a, z]*

*c) [a, c, d, f, n, z, z]*

*d) [a, c, d, f, n, z]*

**40. What is the output?**

public class Test {

public static void main(String [] args) {

int x= 0;

int y= 0;

for (int z = 0; z < 5; z++) {

if (( ++x > 2 ) && (++y > 2)) {

x++;

}

}

System.out.println(x +" "+ y);

}

}

*a) 5 2*

*b) 5 3*

*c) 6 3*

*d) 6 4*