1. Which of the following declarations of an array is incorrect?

public static void main(String[] args) {

1)int[] a[];

2)int b[3];

3)int []c[];

4)int[] d[];

}

Ans: 2

2) What is true after running the following code?

public static void main(String[] args) {

String entries[] = {"entry1","entry2"};

int count=0;

while (entries [count++]!=null){

System.out.println(count);

}

System.out.println(count);

}

1) An Exception will be thrown

2) 0 will be printed as part of the output

3) 2 will be printed as part of the output

4) 3 will be printed as part of the output

Ans: 1) An Exception will be thrown

3) What is the result of compiling and running the followin code?

public static void main(String[] args){

byte b1= 25;

byte b2=45;

byte b3= b1+b2;

}

1 a)70

2 b)CompileError

3 c)25

4 d)RunTimeException

Ans : 2 b) CompileError

4) What is the result of compiling and running the following code?

public class Tester {

public static void main(String[] args) {

String stmt = "Ojas 2009";

String[] arr = stmt.split(" ");

try {

int x = Integer.parseInt(arr[1]);

System.out.print(x); }

finally {

System.out.print("finally");

} }

}

1) 2009 2) finally 3) 2009finally 4) No output will be produced 5 Compilation error

Ans : 2009finally

5) What is the result of running the following program (whichwas compiled fine) given the

command line: java Tester one two

public class Tester\_2{

public static void main(String[] args) {

if (args.length > 0)

for (String str : args)

System.out.print(str);

System.out.print("--");

}

}

1)one--two- 2)onetwo 3)onetwo-- 4)Tester--one--two-- 5)Testeronetwo--

Ans : 5 Testeronetwo--

6) What is the result of compiling and running the following code?

public static void main(String[] args) {

boolean flag = false;

int x = 0;

do {

x++;

}

while (flag=!flag);

System.out.println(x);

}

a) 0 b)1 c) 2 d)3 e)Compilation error

f)The loop is infinite and will cause the program to break

Ans : b)1

9) What is true about has-a and is-a relationships? (Choos two)

A) Instance variables can be used when creating a has- a relationship.

B) Inheritance represents an is-a relationship.

C) Inheritance represents a has-a relationship.

D) Instances must be used when creating a has-a relationship.

Ans : B & D

10) Given the code. What is true?

public class Room {

public int roomNr;

private Date beginDtm;

private Date endDttm;

public void book(int roomNr, Date beginDttm, Date endDttm) {

this.roomNr = roomNr;

this.beginDtm = beginDttm;

this.endDttm = endDttm;

}

}

A) The code demonstrates polymorphism.

B) The class is fully encapsulated.

C) The variable roomNr breaks encapsulation.

D) Variables beginDttm and endDttm break polymorphism.

E) The method book breaks encapsulation

Ans : E

11.What is the result of compiling and running the following code?

public static void main(String[] args) {

String s1 = null;

String s2 = null;

if (s1 == s2)

System.out.print("A");

if (s1.equals(s2))

System.out.print("B");

}

No. Answers Correct

1 "AB" will be printed

2 "A" will be printed followed be a NullPointerException thrown

3 "B" will be printed

4 No output is produced

Ans : 2 "A" will be printed followed be a NullPointerException thrown

12.What is the expected output?

public static void main(String args []) {

String stmt = null;

System.out.print(null+stmt);

System.out.print(stmt+null);

}

No. Answers Correct

1)1 RuntimeException is thrown because of the first print statement

2)RuntimeException is thrown because of the second print statement

3)nullnullnullnull 4)nullnull 5)compilation error

Ans : 3)nullnullnullnull

13.What is the correct output?

public interface Father {

public void go();

}

public interface Mother {

public void go();

}

class Test implements Father, Mother { // line 1

public void go(){ // line 2

System.out.println("Child");

}

public static void main(String args[]) {

new Test().go(); // line 3

}

}

No. Answers Correct

1 Compilation error in line 1

2 compliation error in line 2

3 Child

4 compilation error in line 3

Ans : Child

14.What is the correct output?

class Test {

static void go(int z){

System.out.println("int");

}

static void go(Object z){

System.out.println("Object");

}

static void go(Double z){

System.out.println("Double");

} static void go(Number z){

System.out.println("Number");

}

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

Integer i = 6; go(i);

}

}

Ans : Number

15.Predict the output for below code. ?

boolean a = true;

boolean b = !true;

boolean c = a | b;

boolean d = a & b;

boolean e = d ? b : c;

System.out.println(d + " " + e);

Ans : False True

16.Predict the output when you call bunnyEars2(5)?

public static int bunnyEars2(int bunnies) {

if (bunnies == 0)

return 0;

else if (bunnies % 2 == 0)

return 3 + bunnyEars2(bunnies ‐ 1);

else return 2 + bunnyEars2(bunnies ‐ 1);

}

Ans : Exception

17) What is JVM and is it platform independent?

Ans : JVM stands for java virtual machine, which makes runtime environment to java programs.

Java is a platform independent because every OS will have their own JVM like for windows “window JVM”, for Linux we have “Linux specific JVM”... etc

So we can compile the java program in any system & we can run that on any system using their own JVM.

18) What do you mean by platform independence of Java?

Ans :

In my sense Java is a platform dependent because it follows WORA : Write Once Run Anywhere.

Means we can write code in one system & we can run it on any system.

19) Which class is the superclass of all classes?

Ans : Object class is the super class of all java classes.

20) What is difference between path and classpath variables?

Ans :

Path is an environment variable which is used to find system (executable files (.exe files)).

And class path is something that can helps to fine (.class) files at specific location.

21)Write a program display natural numbers in the given range using method.

import java.util.Scanner;

public class NaturalNumbers {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter any two natural numbers : ");

System.out.println(findNaturals(sc.nextInt(), sc.nextInt()));

}

public static String findNaturals(int num, int limit) {

String res = "natural numbers in between";

int sum = 0;

for (int i = num; i <= limit; i++) {

res += " " + i ;

}

return res;

}

}

22)Write a program read "Welcome to Java" and display Emoclew Ot avaJ.

23) What a program find product of given number using Russian Multiplication?

public class RussianMultiplication {

public static void main(String[] args) {

int n1, n2;

Scanner s = new Scanner(System.in);

System.out.println("Enter first Number");

n1 = s.nextInt();

System.out.println("Enter second number");

n2 = s.nextInt();

System.out.println(getProduct(n1, n2));

}

private static String getProduct(int n1, int n2) {

int product = 0;

if (n1 > 0 && n2 > 0) {

if (n1 % 2 != 0) {

product = product + n2;

}

while (n1 != 1) {

n1 = n1 / 2;

n2 = n2 \* 2;

if (n1 % 2 != 0) {

product = product + n2;

}

}

return "" + product;

} else

return "" + -1;

}

}

24) What is final keyword in java?

Ans :

final is a keyword which can be used to make the value unchangeable (or) else constant.

Some scenarios of final key word.

==> If we declare a variable with final keyword then we can't change it / modify / override.

==> If we declare a method with final keyword then we can't override that method.

25)what is package and how to create our own package in java.

Ans : Java package is nothing but a collection inbuilt libraries & classes.

We can use those classes which are presented in that particular package by importing them in to our class directly.

==> packages will make a programmer life easy, because we need not to write the code to use such functionality.

==>To use those classes available in packages we must import them in to out programs by using “import” statement.

26)What is an Exception and what keywords are available to handle exception comment each one of them.

Ans : Exception is a thing which tends our program abnormal termination.

==> To overcome that abnormal terminations a programmer should use Exception Handling mechanism.

==> Keywords we use in Exception Handling.

1)try

2)catch

3)finally

1)try : try is a keyword which can be used to handle the exception,

When a programmer feels that there was some exception in a block of code then that should be put in the try block.

2)catch : catch is also a keyword which can be used to handle the exception,

The exception code which had in try block will be handled by catch block.

3)finally : finally is also a keyword which can be used to handle the exception,

In finally block we need to mention the code which is mandatory to execute.

27)What is this keyword and super keyword in java?

this keyword:

this is a keyword in java which will points local members.

super keyword:

Super is a keyword in java which will points super members.

28)When will you get NullPointerException?

Ans: NullPointerException is a runtime exception which happens when a programmer try to perform any operation on null;

29)How to create our own Exception in java?

Ans :

Our own exception are called a user defined exceptions,

In java user defined exceptions can be created by using a keyword called “throw”

30)Write a program to sort array elements in ascending order?