1. Given the code fragment:

public static void main(String[] args) {

int a = 10, b = 15/

boolean result- false,

// line niSystem.out.println(result);

Which two statements, when inserted at line ni independently, enable the code to print true?

result a!-br

result! (a > b);

result = (a > b);

result = a br

result a > bi

2. Given:

public class Appl

int numa

public int add(int x) {

num=num+x;

return num;

public void add(int x) {

num = num + x

public static void main(String[] args) {

App obj new App();

obj.add(100);

int ans obj.add(100),

System.out.println(obj.num);

What is the result?

A compilation error occurs.

200

300

100

3. Identify three advantages of object-oriented programming.

☑ code reuse

information sharing

information hiding

separation of state and behavior

✓ modularity

5. Given the code fragment:

clase Ball (

double weight:

public class App (

public static void main(String[] args) {

// line hi

System.out.println(b.weight);

Which code fragment can be inserted at line ni to enable the code to print 0.07

Ball null

b.weight 0.01

Ball know Ball (1

Oball now Ball (0.017

Ball.weight-0.07

6. given the code fragment:

Random r1 = new randam(10);

Random r2 = new random(10);

If(r1. NextInt () == r2.nextint() ) {

System.out.printin(“jacl”);

} else {

System.out.printIn(“jack”);

}

60. Given:

public class Test (

static int var2- 2001/

public static void print() {

System.out.println(var2);

}

public void print(int varl) {

// line nl

System.out.println(varl);

var2 var2 + varl:

// line n2

print():

}

public static void main(String[] args) {

Test obj new Test():

obj.print(100);

}

}

What is the result?

A compilation error occurs at line n2.

100

300

A compilation error occurs at line ni.

100

7. Given the code fragment:

Random r1= new Random(10)/ Random r2 new Random(10); // line nl

if(rl.nextInt() == r2.nextInt()) (

System.out.println("Jack");

} else {

System.out.println("Queen");

What is the result?

The program prints either Jack or Queen.

A compilation error occurs at line nl.

Jack

O Queen

58. Given:

public class Student {

String sName:

char grade:

public static void main(String[] args) {

Students = new Student();

System.out.println("[" + s.sName + ":" + s.grade + "]");

What is the result?

01:1

O [null:null]

[:null]

Inull:]

59. Given the code:

String stringl, string2, string3;

stringl = new String("StringObjects");

string2 stringi:

string3 stringl + string2;

How many String objects are created?

three

Otwo

O one

O four

54. Identify two features of an ArrayList.

✓ It provides the size method to calculate size.

It has a fixed length.

It uses the assignment operator to insert and store an element.

☑ It uses generics to ensure type safety.

56. Given the code fragment:

public static void main(String[] args) {

int varl = 1, var22:

int var3, var4 = 3;

// line ni

int var55, var6 var5;

// line n2

System.out.println(var3+ ":" + var6);

// line n3

What is the result?

Ο 3:5

A compilation error occurs at line n3.

A compilation error occurs at line nl.

A compilation error occurs at line n2.

55. Which statement prints a random number with values only from 1 to 10?

System.out.println(Math.round(Math.random() \* 10));

.out.println(1+ Math.round(Math.random() \* 9));

COS System.out.println(Math.round(Math.random() % 9));

System.out.println(Math.random() \* 10);

53. Given the code fragment:

short x = 1

String y =^ prime prime 2^ prime prime

System.out.println (y + x) ;

What type is the output?

O arrays

Ochar

String

Short

52. Given the code fragment:

long a = 1

boolean c = true;

double e = 3.5

Which statement is valid?

float ga

Obyte h = ct

short-21

O inter

51. Given the code fragment

int number-1

String null

number

8.length()

mumber 1 2

catch (RuntimeException e)

musher to 4

System.out.println foueber

What is the result?

Οι

Οι

Nothing is printed.

50. Given the code fragment:

1. String name - "Fred"/

2. System.out.println("Hello" + // Saying hello

3. name) // to Fred

4. System.out.println("Good /\* and "+

5. " greeting \*/ day!");

6. System.out // A welcome message

7. .println("Welcome + name);

8. System.out.println("Goodbye /\* Farewell + name");

Which statement is true?

The code compiles without errors.

A compilation error occurs at line 5.

A compilation error occurs at line 3.

A compilation error occurs at line 7.

46. What does the java.lang package provide?

classes for the Java language

O classes for the file system

O classes for user interfaces

Oclasses for security

49. Given

public static void main(String[] args) {

boolean valuel-10+52+ 13/

int value2-02

if (valuel- true)

value253 + 10/27

else

value25/3 + 10 2

System.out.println(value2):

What is the result?

O 20

O 32

A compilation error occurs.

O 21

48. Given the code fragment.

int a9:

int b 77:

int c- 33:

if (!(b++ > 77) 66 ++ 10 11 -- 32) {

System.out.println(a+b)/

What is the result?

A compilation error occurs.

88

There is no output.

56

47. Given the code fragment

String namel "car"!

String name "cat"

if (panel.equala (name2)) (

if (namel name2) (

System.out.println("car and cat are same"),

if (namel.compareTo (name2) < 0) {

System.out.println("car is faster");

else if (namel.compareTo(name2) > 0)

System.out.println("cat is faster");

Jelse (

System.out.println("car and cat are fast")/

What is the result?

O car and cat are name

cat is faster

O cat is faster

O car and cat are fast

45. Which class is the parent of all Java exception classes?

O Object

◉ RuntimeException

OException

Throwable

43. You have a microprocessor board, such as a Raspberry Pi, wired to control a drone.

Which edition of Java is geared towards use on simple, closed systems with constrained memory requirements, such as a microprocessor board?

Java Standard Edition with a Compact Profile

Java Enterprise Edition

Java SE Embedded

Java Micro Edition

44. Given:

class Item(

int id:

Item(int id) {

this.id = id:

And the code fragment:

int idl = 100;

int id2=100;

Item il new Item(100);

Item 12 new Item(100);

System.out.println(idl-id2);

System.out.println(11-12);

What is the result?

Otrue true

A compilation error occurs

O false

true

Otrue false

42. Which code fragment prints 123457

for (int count 11 count != 67) { System.out.print(++count);

int count = 01

for (count 1 count <<< 5:) (

System.out.print(count++);

int num-57

for (int count: num) System.out.print(count):

Oint count

for(count 07 count > 5) (

System.out.print(++count),

41. Given:

public class Message (

String msg "Hello Java!":

public void sayMag () {

// line nl

public static void main(String[] args) { Message obj new Message():

obj.saying()

// line n2

Which two modifications can be made, independently, to print Hello Javal?

At line nl, insert System.out.println(Message.msg);

At line 12, insert System.out.println(Message.msg);

At line n2, insert System.out.println(obj.mag),

At line ni, insert: System.out.println(mag)/

At line n2, insert System.out.printin (mag)

40. Given:

public class App {

int varl-12

static int var2-1

public void doWork() (

int var312

varl++7

var2++1

var3++

System.out.println(varl + ":" + var2 + ":" + var3):

public static void main(String[] args) {

App 11 new App():

obji dowork()

App bb12 new App())

ob32.dpwork();

What is the result?

21212

21312

21312

36. Given the code fragment:

// line nl

switch (var) (

case "1":

System.out.println("one");

break:

Which code fragment, when inserted at line nl, enables the code to print one?

String var - "1":

Oint var=1;

O String var - 17

Ochar var='1'/

37. Given the code fragment:

String inputFromConsole-" betaTEST "1

String cleanedInput/

cleanedinput inputFromConsole.toUpperCase () 1

cleanedInput cleanedInput.trim();

System.out.println("[" + cleanedInput + "]");

What is the result?

OBETATEST I

[betaTest]

ObetaTEST]

[BETATEST]

35. Given the content of the Football. java file

package aportar

W line al

And the content of the Player Java file

package playeraz

import sports. Football/

class Player (

String namer

Football sports

Which code fragment can be used at line nl to enable Player. java to compile?

Oprivate class Football

O public static class Football

public class Football

Oclass Football

34. Given the code fragment:

List<String> veg new ArrayList()

veg.add("carrot");

veg.add("cabbage"):

veg.add(1, "capsicum");

System.out.println(veg)/

What is the result?

[carrot, cabbage, capescu

[capsicum, cabbage, carrot)

[carrot, capsicum, cabbage

[capsicum, carrot, cabbage)

33. Which three classes represent runtime exceptions?

ArrayIndexOutOfBoundsException

ArithmeticException

OutofMemoryException

☐ NullPointerError

IllegalArgumentException

27. Identify three features of the Java programming language.

direct memory management

dynamically typed

✔ distributed

multithreaded

✔ strongly typed

30. You have been asked to develop a Java program that prints the elements of an array in reverse orden

Which looping statement cannot be used to meet the requirement?

standard for

Owhile

Odo while

enhanced for

32. Given the code fragment:

public static void main(String[] args) {

int[] anArray(1, 3, 5, 7, 11);

ahArray [3] anArray[1] + anArray [2].

java.util.Arrays.sort(anArray);

for (int x: anArray) (System.out.print(x + " ");}

What is the result?

118531

117431

Ο 1347

11

1358 11

19. Which declaration overloads the test method?

public void test (int t) public int test (int t)

public void test (int t) public void test (String tst)

O public void test (String tst, int ts) private void test (String tst, int ts)

O public void test (int t) public void test (int t)

17. Which statement is true about the Java Runtime Environment (JRE)?

◎ It is a virtual component.

It is a subset of the JVM.

It is a subset of the JDK.

It is platform independent.

24. Identify two Java reserved words.

exception

this

array

string

true

26. Given the code fragment:

boolean flag falser

int count = 07

do

++count/

if (count > 3) {

flag = true;

System.out.println(count);

} while (flag = false);

What is the result?

A compilation error occurs.

04

O3

A runtime exception is thrown.

24. Identify two Java reserved words.

exception

this

array

string

true

28. Which is a feature of the Java programming language?

It converts source code into binary code by using an interpreter.

It can connect with a database management system.

O It provides automatic exception handling techniques.

Ott provides programmatic memory optimization techniques

29. Given the classes:

Grape.java:

package fruitsz

public class Grape (

public void getGrapes()()

PlumCake.java:

package cakes,

//line nl

class PlumCake (

Grape grapes new Grape(); // line n2

public void prepareCake (

grapes.getGrapes();

1

Which code fragment, when inserted at line nl, enables the Plumcake.java file to compile?

O import fruits.Grape.getürapen()

O import fruiter

import froita.Grapez

31. Which statement is true about a Java method?

It must contain at least one parameter.

It must return a value.

It cannot be declared with the private access modifier.

It cannot return multiple values.

25. Given the code fragment:

int var 5

// line ni

while (var > 0) {

// line n2

System.out.print(var);

// line n3

// line n4

Which modification enables the code to print 543210?

O Replace line n2 with while(var < 0) {

Replace line n3 with System.out.print(var--):

Replace line, n3 with --varı and, at line 14 insert System.out.print(var)/

Replace line n2 with do (var > 0)

23. Given the code fragment:

String[] flowers ("lotus", "lily", "rose", "jasmine");

for (String : flowers) (

if (c.length() <4) {

continue:

System.out.print(c+""):

if (c.length()-4) (

break:

What is the result?

A compilation error occurs.

Olotus

lotus lily

Olotus jasmine

22. Which code fragment results in a compilation error?

switch (10 <20)(

case true:

System.out.println("OK")/

breakz

for (int c101 c < 20 c++) {

System.out.println("OK")/

Ο 11 (1020) 1

System.out.println("OK");

O do 1

System.out.println("OK"),

3 while (10 <20)/

20. Given:

public class App (

static boolean options

public static void main(String[] args) (

switch (option) (

default:

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

case true:

System.out.println("Available");

case false:

System, out.println("Not Available");

Why does the compilation fail?

The break statement is missing.

The option variable is not initialized.

O The opties data type is incorrect

The order of case labels is incorrect

19. Which declaration overloads the test method?

O public void test (int t) public int test (int t

O public void test (int t) public void test (String tst)

public void test (String tst, int ts) private void test (String tst, int ts)

O public void test (int t) public void test (int t)

15. Given the code fragment:

public static void main(String[] args) (

String name - "Rita":

int age 24/

line nl

Which code fragment, when inserted at line nl, enables it to print Rita is 14 years old?

System.out.println("ks is in years old", name, age):

System.out.printf("ts is id years old", name, age):

System.out.println("is is id years old" +name+age)

System.out.printf("ko in.in years old", name, age)/

21. Given:

public static void main(String[] args) {

int iterations= 100;

while (count < iterations) {

System.out.println("Iteration " + count);

count++:

1

What is the result?

An error occurs during compilation.

O Iteration plus an increasing number is printed 99 times.

Iteration plus an increasing number is printed 100 times.

The program compiles and nothing is printed.

16. Given the code fragment:

int count - 10:

int pVarl count++:

int pVar2++count:

System.out.println(pVar) + ":" + pVar2);

What is the result?

Ο 11:13

10:12

Ο 11:12

Ο 10:11

15. Given the code fragment:

public static void main(String[] args) {

String name "Rita":

int age 14:

/\* line nl \*/

Which code fragment, when inserted at line ni, enables it to print Rita is 14 years old?

System.out.println("is is in years old", name, age);

System.out.printf("as is id years old", name, age):

System.out.println("is is id years old" +name+age);

System.out.printf("is is in years old", name, age):

14. Given the code fragment:

List<String> names new ArrayList<>();

names.add("Julia");

names.add("Peter");

for (Iterator<String> itr names.iterator(); itr.hasNext();)

System.out.println(itr.next());

What is the result?

O

Peter

Julia

A runtime exception is thrown.

Julia

Peter

A compilation error occurs.

11. Identify two valid data types for the operands of the addition (+) operator?

string

numeric

boolean

array

12. You write a class named DancingApp. It contains the main method for your class.

What must the file containing your class be named in order to compile?

DancingApp.class

Odancingapp.java

DancingApp.java

Oanything you want because the name of the file is not important

10. Which statement is true about accessor methods?

They encapsulate the private instance members.

They can be overloaded.

They inherit the instance members.

They are declared with the private keyword.

5. Given the code fragment:

clase Ball (

double weight:

public class App (

public static void main(String[] args) {

// line hi

System.out.println(b.weight);

Which code fragment can be inserted at line ni to enable the code to print 0.07

Ball null

b.weight 0.01

Ball know Ball (1

Oball now Ball (0.017

Ball.weight-0.07

33. Given the code fragment:

Random rl new Random(10)

Random 12 new Random(10); // line nl

if (rl.nextInt() r2.nextInt()) {

System.out.println("Jack"):

else{

System.out.println("Queen");

What is the result?

The program prints either Jack or Queen.

A compilation error occurs at line nl.

Jack

O Queengunu