

Name:



Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2020

Course: Object Oriented Programming

Semester: 4

CourseCode: CSEG2016

Time: 2hr

Programme: B Tech CSE+CSF

Max. Marks: 100

Instructions: All Questions are compulsory.

What is the output of the following java program?

2 points [Save Answer](#)

```
class FTest {  
public static void main(String args[])  
{  
final int i;  
i = 70;  
i = 70;  
System.out.println(i);  
}  
}
```

- Compile Time Error
- Garbage value
- 70
- 0

QUESTION 2

3 points [Save Answer](#)

What is the output for the below code ?

```
class A implements Runnable{  
public void run(){  
try{  
for(int i=0;i<4;i++){  
Thread.sleep(100);  
  
System.out.println(Thread.currentThread().getName());  
}  
}catch(InterruptedException e){  
  
}  
}  
}  
  
public class Test {  
public static void main(String argv[]) throws Exception{  
A a = new A();  
Thread t = new Thread(a,"A");  
Thread t1 = new Thread(a,"B");  
t.start();  
t.join();  
t1.start();  
}  
}
```

- AAAABBBB
- ABABABAB

QUESTION 31 points

Which of the following are the wrapper classes? i) Random ii) Byte iii) Vector v) Integer

- "1 ,2 and 3"
- "2,3 and 4"
- "1,3 and 4"
- None of the mentioned

QUESTION 43 points

What is the output for the below code ?

```
public class A {
    public A(){
        System.out.println("A");
    }
    public A(int i){
        this();
        System.out.println(i);
    }
}

public class B extends A{
    public B (){
        System.out.println("B");
    }
    public B (int i){
        this();
        System.out.println(i+3);
    }
}

public class Test{
    public static void main (String[] args){
        new B(5);
    }
}
```

- AB 8
- A 5 B 8
- AB 5
- B 8 A 5

QUESTION 52 points

What is the output for the below code ?

```
1. public class Test {
2.     public static void main(String... args) {
3.         int [] index = new int[5];
4.         System.out.println(index instanceof Object);
5.     }
6. }
```

- Compilation fails with an error at line 3
- Compilation fails with an error at line 4
- true
- false

QUESTION 62 points

What is the output for the below code ?

```
1. public class Test {
```

6. }

- 128
- 0
- Compilation fails with an error at line 3
- Compilation fails with an error at line 4

QUESTION 7

1 points Save Answer

What will happen if two thread of the same priority are called to be processed simultaneously?

- Anyone will be executed first lexographically
- Both of them will be executed simultaneously
- It is dependent on the operating system
- None of them will be executed

QUESTION 8

3 points Save Answer

What is the output for the below code ?

```
import java.io.FileNotFoundException;

public class A {
    public void printName() throws FileNotFoundException {
        System.out.println("Value-A");
    }
}

public class B extends A{
    public void printName() throws NullPointerException{
        System.out.println("Name-B");
    }
}

public class Test{
    public static void main (String[] args) throws Exception{
        A a = new B();
        a.printName();
    }
}
```

- Value-A
- Compilation fails-Exception NullPointerException is not compatible with throwsclause in A.printName()
- Name-B
- Compilation succeed but no output

QUESTION 9

1 points Save Answer

What is the process of defining more than one method in a class differentiated by method signature?

- Function overriding
- Function overloading
- Function doubling
- None of the mentioned

QUESTION 10

1 points Save Answer

Which of these is correct way of inheriting class A by class B?

- class B extends class A {}
- class B extends A {}
- class B inherits class A {}

QUESTION 11

1 points Save Answer

" Decrement operator, --, decreases value of variable by what number?"

- 3
- 2
- 1
- 4

QUESTION 12

1 points Save Answer

How can Thread go from waiting to runnable state?

- notify/notifyAll
- When sleep time is up
- Using resume() method when thread was suspended
- All

QUESTION 13

2 points Save Answer

What will be answer of the following java program:

```
class Test
{
    public static void main(String args[])
    {
        String s1="UPES";
        String s2="UPES";
        System.out.println(s1==s2);
        System.out.println(s1.equals(s2));
    }
}
```

- true
true
- true
false
- false
true
- false
false

QUESTION 14

1 points Save Answer

Select the one most appropriate answer. What is the purpose of method parseInt defined in Integer class.

- The method converts an integer to a String.
- The method is used to convert String to an integer, assuming that the String represents an integer.
- The method is used to convert String to Integer class, assuming that the String represents an integer.
- The method converts the Integer object to a String.

QUESTION 15

3 points Save Answer

- false run-A true
- false run-A false
- true run-A true
- Compilation fails due to an error on line 7

What will happen when you attempt to compile and run the following code ?

```
class A implements Runnable{
    public void run(){
        System.out.println("run-A");
    }
}

1. public class Test {
2.     public static void main(String argv[]){
3.         A a = new A();
4.         Thread t = new Thread(a);
5.         System.out.println(t.isAlive());
6.         t.start();
7.         System.out.println(t.isAlive());
8.     }
9. }
```

QUESTION 16

1 points

Which of the following keywords are valid that are used in java exception handling?

- try, catch, thrown
- try, catch, final
- catch, throw, throws
- try, finally, thrown

QUESTION 17

3 points

```
public class test {
    public static void main(String args[]) {
        int i=1, j=1;
        try {
            i++;
            j--;
            if(i == j)
                i++;
        }
        catch(ArithmeticException e) {
            System.out.println(0);
        }
        catch(ArrayIndexOutOfBoundsException e) {
            System.out.println(1);
        }
        catch(Exception e) {
            System.out.println(2);
        }
        finally {
            System.out.println(3);
        }
        System.out.println(4);
    }
}
```

- a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
- a,c,d
 - a,b,c
 - a,b
 - d,e

QUESTION 18

1 points

Which of these class is used to create an object whose character sequence is immutable?

- String
- StringBuffer

QUESTION 19

1 points Save n w

Which concept of Java is achieved by combining methods and attribute into a class?

- Abstraction
- Polymorphism
- Inheritance
- Encapsulation

QUESTION 20

1 points Save An r

A Java Server Page (JSP) is transformed into-

- Java Applet
- Java Servlet
- Both Java Applet and Servlet
- It directly executes without conversion.

QUESTION 21

2 points

What is the output for the below code ?

```
1. public interface InfA {
2.     protected String getName();
3. }

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());
    }
}
```

- test-name
- Compilation fails due to an error on lines 2
- Compilation fails due to an error on lines 1
- Compilation succeed but Runtime Exception

QUESTION 22

1 points Sa eA w r

How many characters are allowed in java for identifiers?

- 32
- 64
- 512
- No Limit

QUESTION 23

2 points

- Runtime Exception
- one three two
- one three two one
- one two three

What is the output for the below code?

```
import java.util.Iterator;
import java.util.TreeSet;

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

        TreeSet s1 = new TreeSet();
        s1.add("one");
        s1.add("two");
        s1.add("three");
        s1.add("one");

        Iterator it = s1.iterator();
        while (it.hasNext() ) {
            System.out.print( it.next() + " " );
        }

    }
}
```

QUESTION 24

1 points Save Answer

Which type of driver is preferred if our Java application needs to access multiple types of databases at the same time?

- Type 1
- Type 2
- Type 3
- Type-4

QUESTION 25

1 points Save Answer

What is the return type of Constructors?

- none of the mentioned
- int
- float
- void

QUESTION 26

1 points Save Answer

Suppose the following Java code executes properly, what is the result?

```
try
{
    Connection con = DriverManager.getConnection(url, username, pwd)
    Statement stmt = con.createStatement();
    System.out.print(stmt.executeUpdate("INSERT INTO Emp VALUES (101,'Peter')");
}
}
```

- true
- 1
- false
- 0

QUESTION 27

1 points Answer

Which tag doesn't belong to web.xml?

- url-pattern

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

-
- servlet-mapping

Save All Answers

Close Window

QUESTION 28

2 points

swer

```
1. class MyClass {
2. public void message (int i) {
3. public int j= i;
4. System.out.println("Value of j: " + j);
5. }
6. public static void main(String[] args) {
7. MyClass ma = new MyClass();
8. ma.message(15);
9. }
10. }
```

Which of the following statements is true about this code?

- The code will compile and execute fine, and the output will be Value of j: 15
- Line 3 will generate a compiler error.
- The code will compile but will give an error at execution time.
- None of the above

QUESTION 29

1 points

ns

what is the correct way of getting the number of elements from one-dimensional array 'arr'.

- arr.size
- arr.length
- arr.length()
- arr.length()-1

QUESTION 30

2 points

```
class A {
    class A1 {
        void printValue() {
            System.out.println("A.A1");
        }
    }
}

1. public class Test{
2.     public static void main (String[] args){
3.         A a = new A();
4.         // INSERT CODE
5.         a1.printValue();
6.     }
7. }
```

- A.A1 a1 = new A.A1();
- A.A1 a1 = a.new A1();
- A a1 = new A.A1();
- All of the above

QUESTION 31

1 points

Sa s r

What is difference between starting thread with run() and start() method?

- There is no difference
- run() calls start() method internally
- "When you call start() method, main thread internally calls run() method to start newly created Thread"
- None

- It can take any number of parameters
- It can contain return type
- It can have any non access modifiers
- Constructor cannot throw exception

QUESTION 33

1 points

Which of these is not a Thread state?

- new
- runnable
- sleep
- terminated

QUESTION 34

2 points

Save Answer

```
class Test {  
    public static void main(String args[]) {  
        int arr[] = new int[2];  
        System.out.println(arr[0]);  
    }  
}
```

- The program does not compile because arr[0] is being read before being initialized
- The program generates a runtime exception because arr[0] is being read before being initialized
- The program compiles and prints 0 when executed
- The program compiles and prints 1 when executed

QUESTION 35

1 points

Answer

How many identifiers are present in the following program?

```
class Student  
{  
    public static void main(String args[])  
    {  
        int x=10;  
    }  
}
```

- 1
- 2
- 4
- 5

QUESTION 36

2 points

A

```
public static void main(String args[]) {  
    int x,y;  
    x = 3 & 5;  
    y = 3 | 5;  
    System.out.println(x + " " + y);  
}
```

QUESTION 37

3 points a e A r

what is the output of this program?

```
class Teststatic {
    static int x = 10;
    public static void main(String[] args)
    {
        Teststatic t1 = new Teststatic();
        Teststatic t2 = new Teststatic();

        t1.x = 20;
        System.out.print(t1.x + " ");
        System.out.println(t2.x);
    }
}
```

- 20 10
- 20 20
- 10 10
- 10 20

QUESTION 38

2 points Save

```
<% int x = 5; %>
<%! int x = 10; %>
<%! int y = 50; %>
The value of b multiplied by a is <%= y * x %>
```

- 500
- 250
- error
- 0

QUESTION 39

3 points e

What is the output for the below code ?

```
class A extends Thread{
    int count = 0;
    public void run(){
        System.out.println("run");
        synchronized (this) {
            for(int i =0; i < 50 ; i++){
                count = count + i;
            }
            notify();
        }
    }
}

public class Test{

    public static void main(String argv[] ) {
        A a = new A();
        a.start();
        synchronized (a) {
            System.out.println("waiting");
            try{
                a.wait();
            }catch (InterruptedException e){
            }
            System.out.println(a.count);
        }
    }
}
```

- waiting run 1225
- waiting run 0

QUESTION 40

1 points

Answer

An application programming interface (API) is defined by Java _____ specification that enables the communication between the Web server and the application program.

- Server
- Servlet
- JDBC
- Web Container

QUESTION 41

3 points

Save Answer

Which statements about JDBC are true?

- a. JDBC is an API to connect to relational-, object- and XML data sources
 - b. JDBC stands for Java DataBase Connectivity
 - c. JDBC is an API to access relational databases, spreadsheets and flat files
 - d. JDBC is an API to bridge the object-relational mismatch between OO programs and relational databases.
 - e. java.sql and javax.sql packages contain the JDBC classes.
 - f. A JDBC DataSource is a factory of connections to a physical data source
- All statements are true
 - b,c, d, e,f
 - b,c,e,f
 - a,b,e,f

QUESTION 42

2 points

View

Choose correct answers

- 1) Every class is part of some package.
- 2) All classes in a file are part of the same package.
- 3) If no package is specified, the classes in the file go into a special unnamed package
- 4) If no package is specified, a new package is created with

- ONLY 1,2, AND 3
- ONLY 1,2, AND 4
- ONLY 4
- ONLY 1 AND 3

QUESTION 43

2 points

Save Answer

What is the output for the below code ?

```
1. public class Test {
2.     public static void main(String... args) {
3.         Integer i = 34;
4.         String str = (i<21)?"jan":(i<56)?"feb":"march";
5.         System.out.println(str);
6.     }
7. }
```

- feb
- jan
- march
- Compilation fails with an error at line 4

QUESTION 44

1 points

Answer

- java.util.List
- java.util.Vector
- java.util.HashSet

QUESTION 45

2 points

Save n

What is the result of the following java program?

```
abstract class Writer {
    public static void write() {
        System.out.println("Writing...");
    }
}
class Author extends Writer {
    public static void write() {
        System.out.println("Writing book");
    }
}
public class Programmer extends Writer {
    public static void write() {
        System.out.println("Writing code");
    }
    public static void main(String[] args) {
        Writer w = new Programmer();
        w.write();
    }
}
```

- Writing book
- Writing...
- Writing code
- Compile Time Error

QUESTION 46

1 points

Answer

Which of these keyword must be used to inherit a class?

- extends
- extent
- this
- super

QUESTION 47

3 points

What is the output for the bellow code?

```
import java.util.Iterator;
import java.util.Set;
import java.util.TreeSet;

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

        Set s = new TreeSet();
        s.add("7");
        s.add(9);
        Iterator itr = s.iterator();
        while (itr.hasNext())
            System.out.print(itr.next() + " ");

    }
}
```

- 79
- None of the above

QUESTION 48

2 points

What will be the answer of the following java program:

```
1. class Test{
2. public static void main(String args[]){
3. String s1="Object";
4. s1=s.concat(" Oriented");
5. System.out.println(s1);
6. }
7. }
```

- Object
- Object Oriented
- Oriented
- Oriented Object

QUESTION 49

1 points

Which of the following is not a valid type of statement in JDBC?

- Statement
- QueryStatement
- PreparedStatement
- None of these

QUESTION 50

2 points

What is the output for the below code ?

```
public class D {
    int i;
    int j;
    public D(int i,int j){
        this.i=i;
        this.j=j;
    }

    public void printName() {
        System.out.println("Name-D");
    }
}

1. public class Test{
2.     public static void main (String[] args){
3.         D d = new D();
4.         d.printName();
5.
6.     }
7. }
```

- Name-D
- Compilation fails due to an error on lines 3
- Compilation fails due to an error on lines 4
- Compilation succeed but no output

QUESTION 51

3 points

Choose correct answers

1. Servlet is a Java technology based Web component.
2. session.retrieveAttribute(String name) is used to get an attribute in a HTTP Session object in servlets?

- 1,2,3,5
- 1,3,5
- 1,4,5
- 1,2,4

QUESTION 52

2 points Save Answer

What is the output of the following program?

```
class Test
{
    public static void main(String args[])
    {
        try
        {
            int i, sum;
            sum = 10;
            for (i = -1; i < 3 ;++i)
            {
                sum = (sum / i);
                System.out.print(i);
            }
            catch(ArithmeticException e)
            {
                System.out.print("0");
            }
        }
    }
}
```

- 101
- 10
- 10
- 11

QUESTION 53

1 points Save Answer

Which of the following statements is false?

- A set is a collection that does not allow duplicates.
- A map can store duplicate values.
- A list is a collection that is ordered by index.
- A list is a collection that cannot have duplicates.

QUESTION 54

1 points Save Answer

"Using which of the following, multiple inheritance in Java can be implemented?"

- Multithreading
- Interfaces
- Protected methods
- Private methods

QUESTION 55

2 points Save Answer

- Compiler error
- Runtime error
- w1 is equal to w2!

```
Integer w1 = new Integer(2);
Integer w2 = new Integer(2);
if(w1 == w2)
{
System.out.println("w1 is equal to w2!");
}
else
{
System.out.println("w1 is not equal to w2!");
}
}
```

What is the output of this code?

QUESTION 56

1 points

Save Answer

In implementing two classes Employee and Manager, such that each Manager is an Employee, what should be the relationship between these classes. Select the one correct answer.

- Employee should be the base class of Manager class.
- Manager should be the base class of Employee class.
- Manager class should include the Employee class as a data member.
- Employee class should include Manager class as a data member.

QUESTION 57

2 points

e

What would happen when a thread executes the following statement in its `run()` method?

```
sleep(500);
```

- It is going to stop execution and restart execution exactly after 500 milliseconds.
- It is going to stop execution and restart execution not earlier than 500 milliseconds.
- It will result in compiler error because `sleep()` method cannot be called inside `run()` method.
- It will result in compiler error because the `sleep()` method does not take any argument.

QUESTION 58

2 points

Save

- a. A Java program must have a package statement.
- b. A package statement if present must be the first statement of the program (barring any comments).
- c. If a Java program defines both a package and import statement, then the import statement must come before the package statement.
- d. An empty file is a valid source file.
- e. A Java file without any class or interface definitions can also be compiled.
- f. If an import statement is present, it must appear before any class or interface definitions.

- a,b,d,f
- b,d,e,f
- a,c,d,e
- a,b,c,d

QUESTION 59

1 points

Save Answer

Identify the legal JSP syntax for printing the value of a.

- `<%= a; %>`
- `<%int a = 1;%>`
- `<%int a = 1%>`

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers

Close Window

Sa

QUESTION 60

1 points

ave A sw r

Which access modifier makes a member available only to classes within the same package or subclasses?

- public
- private
- protected
- none