QUESTION 1 Choose the correct one to import a entire package A) import package B) import package*; C) import package.*; D) import package.*.; A) A B) B C) C D) D ANS) C **QUESTION 2** public Object m() Object o = new Float(3.14F)Object [] oa = new Object[I]/* Line 5 */ oa[0] = o /* Line 6 */o = null /* Line 7*/oa[0] = null /* Line 8 */ return o /* Line 9 */ When is the Float object, created in line 3, eligible for garbage collection? A) just after line 5 B) just after line 6 C) just after line 7 D) just after line 8 E) just after line 9 ANS) just after line 8 **QUESTION 3**

Consider the code

int[] $x = \{5,6,7,8,9\};$

```
int[] y = x;
y[2] = 10;
What is the value of x[2]?
A) 6
B) 7
C) 8
D) 10
E) 0
ANS) 10
QUESTION 4
Given the following declarations, which of the assignments given in the options below would
compile. Select the two correct answers.
int i = 5;
boolean t = true;
float f = 2.3F;
double d = 2.3;
A. t = (boolean) i;
B. f = d;
C. d = i;
D. i = 5;
E. f = 2.8;
A) A,B,C
B) B,C
C) C,D
D) C,D,E
E) A,D,E
ANS) C,D
  .....
QUESTION 5
What is the output of the below code:
class Test{
public static void main(String[] args) {
```

```
System.out.println(new Test(){
 public String toString(){
 return "test";
 }
});
}
A) test
B) No output
C) Compilation fails
D) Exception is thrown at Runtime
ANS) test
QUESTION 6
import App;
public class MyApp{
public static void main(String[] args){
//code here;
}
How will you save the above java program?
A) App.java
B) App.class
C) MyApp.java
D) MyApp.class
ANS) MyApp.java
QUESTION 7
What is the output of the below code:
class Test {
  public static void main(String args[]) {
     int array[] = new int [5];
     for (int i = 5; i > 0; i--)
       array[5 - i] = i;
```

```
Arrays.sort(array);
     System.out.print(Arrays.binarySearch(array, 4));
  }
}
A) 1
B) 1
C) 2
D) 3
ANS) 3
QUESTION 8
What is the output of the below code:
public class Test {
public static void main(String... args) {
double d=2D+2d+2.+2l+2L+2f+2F+2.f+2.D;
 System.out.println(d);
}
}
A) 18
B) 9
C) 9.0
D) 18.0
E) Run time exception
F) Compiler error
ANS) 18.0
QUESTION 9
What is the output of the below code?
class Test{
 public static void main(String[] args) {
 Object obj = new Object();
 System.out.println(obj.getClass());
 }
}
```

```
A) class java.lang.Test
B) class java.lang.Object
C) java.lang.Object
D) java.lang.Test
ANS) class java.lang.Object
QUESTION 10
What is the output of the below code:
class Test{
public static void main(String[] args) {
 try {
 int[] array = \{1,2,3,4,5\};
 for (int i = 0; i < 7; ++i) {
  System.out.print(array[i]);
 } catch (ArrayIndexOutOfBoundsException e) {
 System.out.print("0");
 }
}
}
A) 12345
B) 123450
C) 12345
ArrayIndexOutOfBoundException
D) Compilation fails
ANS) 123450
QUESTION 11
What is the output of the below code:
class X{
int a;
static int a;
int Add(){
 return a;
```

```
}
}
A) 0
B) No Ouput
C) Compilation fails
D) Run time error
ANS) Compilation fails
QUESTION 12
What is the output of the below code:
int[] array = {0,1,2,3};
 array.clear(2);
 System.out.println(array);
A) {0,1,3}
B) {2,3}
C) \{0,1\}
D) Compilation Fails
ANS) Compilation fails
QUESTION 13
Write the valid code to get the month?
public class Test {
public static void main(String[] args) {
Calendar calendar = new GregorianCalendar();
//insert code here
 System.out.println(month);
}
}
A) int month
               = calendar.get(Calendar.DAY_OF_MONTH);
               = calendar.get(Calendar.MONTH);
B) int month
               = calendar.get(MONTH);
C) int month
D) int month
               = calendar.get(MONTH);
```

```
ANS) int month = calendar.get(Calendar.MONTH);
QUESTION 14
 .....
What is the output of the below code:
package com.manipal.demo;
public class DemoProgram {
public static void main(String[] args) {
 Class cls = DemoProgram.class;
 System.out.println(cls.getName());
}
}
A) DemoProgram
B) com.manipal.demo.DemoProgram
C) Compilation fails
D) runtime error
ANS) com.manipal.demo.DemoProgram
QUESTION 15
What is the output of the below code:
public class DemoProgram {
public static void main(String[] args) {
  double x = 60984.123;
  double y = -497.99;
  System.out.println(Math.floor(x)+" "+Math.floor(y)+" "+Math.floor(0));
}
}
A) 60984.2 -498.0 0.1
B) 60984.2 -498.1 0.0
C) 60984.0 -498.0 0.0
D) 60984.0 -498.0 0.0
E) Compilation fails
ANS) 60984.0 -498.0 0.0
```

QUESTION 16 Which is the primitive data type of c in the below synatx: ? C = 57.659A) float B) Float C) double D) Double ANS) double **QUESTION 17** Whats is the output of the below code: package com.manipal.demo; public class DemoProgram { public static void main(String[] args) { DemoProgram demo = new DemoProgram(); System.out.println(demo.getClass()); } } A) com.manipal.demo.DemoProgram B) class DemoProgram C) DemoProgram D) class com.manipal.demo.DemoProgram ANS) class com.manipal.demo.DemoProgram

QUESTION 18

}

Which statement is valid for the below syntax: while (i<10 && i>24){

- A) while loop never executes always true
- B) while loop never executes always false
- C) Compilation fails
- D) Exception thrown at run time

ANS) while loop never executes always false
QUESTION 19
What is the value and data type for the below code: 2+3*5 = ?
A) 17 int
B) 25 int
C) 17 byte D) 25 byte
5) 20 byte
ANS) 17 int
QUESTION 20
class Base {}
<pre>class Derived extends Base { public static void main(String args[]){ Base a = new Derived(); System.out.println(a instanceof Derived); } }</pre>
A) true
B) false
ANS) true
QUESTION 21
Given the declaration
Given the declaration Circle x = new Circle(), which of the following statement is most accurat A. x contains an int value. B. x contains an object of the Circle type.

C. x contains a reference to a Circle object.

D. You can assign an int value to x.

```
A) A
B) B
C) C
D) D
ANS) C
QUESTION 22
Given:
  class Mammal { }
  class Raccoon extends Mammal {
   Mammal m = new Mammal();
  }
  class BabyRaccoon extends Mammal { }
Which four statements are true? (Choose four.)
A. Raccoon is-a Mammal.
B. Raccoon has-a Mammal. C. BabyRaccoon is-a Mammal.
D. BabyRaccoon is-a Raccoon.
E. BabyRaccoon has-a Mammal.
F. BabyRaccoon is-a BabyRaccoon.
A) A,B,D,C
B) C,D,E,A
C) A,D,E,F
D) A,B,C,F
ANS) A,B,C,F
QUESTION 23
Given:
public interface A{public void m1();}
class B implements A{}
class C implements A {public void m1(){}}
class D implements A{public void m1(int x){}}
abstract class E implements A{}
abstract class F implements A{public void m1(){}}
```

abstract class G implements A{public void m1(int x){}} What is the result
A) compilation succeeds B) Exactly one class does NOT compile C) Exactly two classes do NOT compile D) Exactly four classes do NOT compile E) Exactly three classes do NOT compile ANS) Exactly two classes do NOT compile
QUESTION 24
Given: interface Foo { int bar(); } public class Test { public static int fubar(Foo foo) { return foo.bar(); } public void testFoo() { fubar(/*Insert Code here*/); } }
Which code allows the class Test to compile? A. Foo { public int bar() { return 1; } B. new Foo { public int bar() { return 1; } C.new Foo() { public int bar() { return 1; }} D. new class Foo { public int bar() { return 1; }
A) A B) B C) C D) D
ANS) C

A team of programmers is reviewing a proposed API for a new utility class. After some discussion,

they realize that they can reduce the number of methods in the API without losing any

functionality. If they implement the new design, which two OO principles will they be
promoting?
A. Looser coupling B. Tighter coupling
C. Lower cohesion
D. Higher cohesion
E. Weaker encapsulation
A) A
B) B
C) C
D) D
E) E
ANOVA D
ANS) A,D
QUESTION 26
A team of programmers is involved in reviewing a proposed design for a new utility
class. After
some discussion, they realize that the current design allows other classes to access
methods in
the utility class that should be accessible only to methods within the utility class itself.
What design
issue has the team discovered?
A. Tight coupling
B. Low cohesion
C. High cohesion
D. Weak encapsulation
E. Strong encapsulation
A) A
B) B
C) C
D) D
E) E
ANS) D

```
What will be the output of the program?
public class Animal
public static void main(String [] args)
{
Dog [][] theDogs = new Dog[3][]
System.out.println(theDogs[2][0].toString())
}}
class Dog { }
A) null
B) the Dogs
C) Compilation fails
D) An exception is thrown at runtime
ANS) An exception is thrown at runtime
QUESTION 28
   -----
What will be the output of the below code
class Employee{
Employee(){
System.out.println(1);
}
void test(){
this();
System.out.println(2); }
class Manager
public static void main(String args[]){
Employee e1=new Employee();
}}
A) 1
B) 2
C) compile time error
D) run time error
```

ANS) compile time error

```
QUESTION 29
Choose the invalid declaration of String array?
A) String[] s
B) String s[]
C) String [s]
D) String []s
ANS) String [s]
QUESTION 30
import java.io.*;
  public class Test {
   public static void main(String[] args) {
   String s1 = "abc";
   String s2 = "def";
   String s3 = s1.concat(s2.toUpperCase());
   System.out.println(s1+s2+s3);
    }
  }
What is the output of the above code?
A) abcDEF
B) abcdefabcdef
C) abcdefDEF
D) abcdefabcDEF
ANS) abcdefabcDEF
QUESTION 31
public class Test {
public static void main(String[] args) {
String a = "hello i love java";
System.out.println(a.indexOf('i')+" "+a.lastIndexOf('o')+" "+a.lastIndexOf('i')+" "+ a.indexOf('o'));
}
```

```
}
What is the ouput of the program?
A) 6967
B) 6964
C) 5964
D) 5954
ANS) 6964
QUESTION 32
What is the ouput of the below code:
class Test {
  public static void main(String args[])
    StringBuffer s1 = new StringBuffer("Hello");
    StringBuffer s2 = s1.reverse();
    System.out.println(s2);
}
A) Hello
B) olleH
C) Compilation fails
D) Runtime error
ANS) olleH
QUESTION 33
What is the ouput of the below code:class Test
{
public static void main(String[] s)
 String s1="Hello",s2="World";
 System.out.println(s1+s2);
 System.out.println(s1.concat(s2));
 }
}
```

A) HelloWorld B) HelloWorld HelloWorld C) Compilation fails D) Runtime error ANS) HelloWorld
HelloWorld
QUESTION 34
What is the output of the below code, public class Test { public static void main(String[] args) { System.out.println("String "+new Integer("4")+5); } }
A) String 9 B) String 45 C) compilation error D) run time error ANS) String 45
QUESTION 35
What will be the output of the below code: if("Welcome".trim() == "Welcome".trim()) System.out.println("Equal"); else System.out.println("Not Equal");
A) compile and display "Equal" B) compile and display "Not Equal" C) cause a compiler error D) compile and display NULL

ANS) compile and display "Equal"

```
QUESTION 36
Which are the legal Stirng operations
A) s3 = s1 + s2;
B) s3 = s1 - s2;
C) s3 = s1&s2;
D) s3 = s1\&\&s2;
A) A
B) B
C) C
D) D
ANS) A
QUESTION 37
What is the output of the below code
class Test{
public static void main(String[] args) {
 System.out.println(5.45+"3,2");
}
A) 5
B) 5.4
C) 5.453,2
D) Compilation Fails
ANS) 5.453,2
QUESTION 38
What is the output of the below code:
StringBuffer s = new StringBuffer("Hello");
StringBuffer s1 = new StringBuffer("World");
s.append(s1);
System.out.println(s);
```

A) Hello
B) World
C) Hello World
D) Compilation Fails
ANS) Hello World
QUESTION 39
What is the ouput of the below syntax:
String s = "IDEAL";
System.out.println(s.substring(0, s.length()-1)+(s.charAt(s.length()-1)));
A) IDE
B) IDEAL
C) IDEA
D) Compilation Fails
ANS) IDEAL
QUESTION 40
What is the output of the below code:
class Test{
public static void main(String[] args) {
StringBuffer buffer = new StringBuffer("HelloWorld");
buffer.insert(5, "test");
System.out.println(buffer);
}
}
A) Hellotest
B) HellotestWorld
C) Compilation fails
D) Runtime error
ANS) HellotestWorld

```
What is the output of the below code:
public class Test{
public static void main(String[] args) {
 String s = new String("IBM");
 System.out.println(s.length());
}
}
A) 2
B) 3
C) Compilation fails
D) runtime error
ANS) 3
QUESTION 42
What is the output of the below code:
class Test{
public static void main(String[] args) {
 String str = "Good Morning";
 str.concat("Hello");
 System.out.println(str);
}
A) Good Morning
B) Good Morning Hello
C) Compilation fails
D) runtime error
ANS) Good Morning
QUESTION 43
What is the output of the below code:
class Test{
public static void main(String[] args) {
 StringBuffer buffer = new StringBuffer("Good");
```

```
buffer.reverse();
 System.out.println(buffer);
}
}
A) dooG
B) Good
C) Compilation fails
D) runtime error
ANS) dooG
QUESTION 44
What is the output of the below code:
public class DemoProgram {
public static void main(String[] args) {
 System.out.println(5+4+"String"+7+1);
}
}
A) 54String71
B) 9String8
C) 9String71
D) 54String8
ANS) 9String71
QUESTION 45
What is the output of the below code:
public class DemoProgram {
public static void main(String[] args) {
 String str = "Hello World";
 str.addAtIndex(5,"test");
}
}
A) HellotestWorld
```

B) Hellotest

```
D) runtime error
ANS) Compilation fails
QUESTION 46
class SuperClass {
public int dolt(String str, Integer... data)throws ArrayIndexOutOfBoundsException{
 String signature = "(String, Integer[])";
 System.out.println(str + " " + signature);
 return 1;
}}
public class Test extends SuperClass{
public int dolt(String str, Integer... data) throws Exception
{
 String signature = "(String, Integer[])";
 System.out.println("Overridden: " + str + " " + signature);
 return 0;
}
public static void main(String... args)
 SuperClass sb = new Test();
 try{
 sb.dolt("hello", 3);
 }catch(Exception e){
 }
 }
}
What is the output of the above code?
A) Overridden:hello(String,
Integer[])
B) hello (String, Integer[])
C) This code throws exception at run time
D) compile time error
ANS) compile time error
QUESTION 47
```

C) Compilation fails

Pick runtime exception?.... A. ClassCastException B. FileNotFoundException C. NullPointerException D. SecurityException E. Above all A) A,B,C B) C,D,E C) A,D,E D) A,C,D E) E ANS) A,C,D **QUESTION 48** public class Test { public static void main(String args[]) { try { int a = args.length; int b = 10 / a; System.out.print(a); try { if (a == 1)a = a / a - a; if (a == 2) { int $c[] = \{1\};$ c[8] = 9;} catch (ArrayIndexOutOfBoundsException e) { System.out.println("TypeA"); } catch (ArithmeticException e) { System.out.println("TypeB"); }

```
}
A) TypeA
B) 0TypeA
C) 0TypeB
D) TypeB
ANS) TypeB
QUESTION 49
public class Test {
 public static void main(String[] args) {
try{
 System.out.println("String "+1/0);
}catch(ArithmeticException ae){
 System.out.println("Catch block");
}
  }
}
What is the output of the program?
A) String Infinity Catch block
B) String Catch block
C) Catch block
D) Infinity
ANS) Catch block
QUESTION 50
In multiple catch clause which of the following statements are valid?
```

- A) Super class block will execute first
- B) Sub class catch block will execute first
- C) Super class catch block will never execute
- D) Sub class catch block will never execute

```
QUESTION 51
_____
What is the output of the below code:
public class Test {
public static void main(String[] args) {
double x = 0, y = 5.4324;
try {
 System.out.println( (y/x) );
}
catch (Exception e) {
 System.out.println("Exception");
}
catch (Throwable t) {
 System.out.println("Error");
} } }
A) Exception
B) Error
C) Infinity
D) Exception Error
ANS) Infinity
QUESTION 52
What is the output of the below code:
class OurCreatedException extends Exception{
OurCreatedException(){
 super();
}
}
class XYZ{
public static void method(String name) throws OurCreatedException{
 if(name==null){
 throw new OurCreatedException();
 }
 else{
```

```
System.out.println("Welcome "+name);
 }
}
}
class Test{
public static void main(String[] args) {
 XYZ.method("John");
}
}
A) Welcome John
B) null
C) Compilation fails
D) OurCreatedException thrown at run time
ANS) Compilation fails
QUESTION 53
What type of Exception Occurs at the following snippet code:
Number n = new Integer(12);
 Double d = (Double)n;
 System.out.println(d);
A) NumberFormatException
B) ClassCastException
C) InputMisMatchException
D) None of the above
ANS) ClassCastException
QUESTION 54
What is the output of the below code:
public class DemoProgram {
public static void main(String[] args) {
 try{
 int a=0,b=10;
 int c=a/b;
 System.out.println("Hello");
```

```
}catch(ArithmeticException e){
 System.out.println("world");
 }
}
A) world
B) Hello
C) ArithmeticException
D) Compilation fails
ANS) Hello
QUESTION 55
What type of exception occurs in the below code:
class Test{
public static void main(String[] args) {
try{
 int[] array = {1,3,5,6};
 System.out.println(array[-1]);
 }catch(NegativeArraySizeException ne){
 ne.printStackTrace();
 }
 catch(ArrayIndexOutOfBoundsException ae){
 ae.printStackTrace();
 }
}
A) NegativeArraySizeException
B) ArrayIndexOutOfBoundsException
C) both a & b
D) none of the above mentioned
ANS) ArrayIndexOutOfBoundsException
QUESTION 56
```

```
What is the output for the below code?
class Test{
public static void main(String args[]){
try{
System.out.println("one");
System.exit(0);
}catch(Exception e){
System.out.println("two"); }
finally{
System.out.println("three");
}
}
}
A) one
B) one two
C) one two three
D) two three
ANS) one
QUESTION 57
Given that the current directory is empty, and that the user has read and write
permissions, and
the following:
11. import java.io.*;
12. public class DOS {
13. public static void main(String[] args) {
14. File dir = new File("dir");
15. dir.mkdir();
16. File f1 = new File(dir, "f1.txt");
17. try {
18. f1.createNewFile();
19. } catch (IOException e) {;}
20. File newDir = new File("newDir");
21. dir.renameTo(newDir);
22. }
23. }
Which statement is true?
```

A. Compilation fails.

```
C. The file system has a new empty directory named newDir.
D. The file system has a directory named dir, containing a file f1.txt.
E. The file system has a directory named newDir, containing a file f1.txt.
A) A
B) B
C) C
D) D
E) E
ANS) E
QUESTION 58
   -----
public class ByteTest {
public static void main(String[] args) {
   String obj = "abc";
    byte b[] = obj.getBytes();
    ByteArrayInputStream obj1 = new ByteArrayInputStream(b);
    System.out.println((char)obj1.read());
}
What is the output?
A) a
B) b
C) c
D) abc
E) 97
ANS) a
QUESTION 59
What is the ouput of the below code:
  import java.io.*;
  class files {
    public static void main(String args[]) {
       File obj = new File("/FilesDemo/DemoPrograms");
       System.out.print(obj.getAbsolutePath());
```

B. The file system has a new empty directory named dir.

```
}
  }
A) FilesDemo/DemoPrograms
B) /FilesDemo/DemoPrograms/
C) /FilesDemo/DemoPrograms
D) Compilation fails
ANS) /FilesDemo/DemoPrograms
QUESTION 60
What is the output of below code,
 File f = new File("c:\\test\\abc.txt");
 System.out.println(f.getName());
A) abc
B) abc.txt
C) c:\test\abc.txt
D) compile error
ANS) abc.txt
QUESTION 61
What is the output of the below code:
class Test {
  public static void main(String[] args) {
    try {
       Myclass object1 = new Myclass("Hello", -7, 2.1e10);
     FileOutputStream fos = new FileOutputStream("serial");
     ObjectOutputStream oos = new ObjectOutputStream(fos);
       oos.writeObject(object1);
       oos.flush();
       oos.close();
  }
  catch(Exception e) {
     System.out.println("Serialization" + e);
       System.exit(0);
    }
```

```
try {
     int x;
     FileInputStream fis = new FileInputStream("serial");
     ObjectInputStream ois = new ObjectInputStream(fis);
        x = ois.readInt();
        ois.close();
     System.out.println(x);
  }
  catch (Exception e) {
        System.out.print("deserialization");
     System.exit(0);
  }
  }
}
class Myclass implements Serializable {
String s;
int i;
double d;
  Myclass(String s, int i, double d){
  this.d = d;
  this.i = i;
  this.s = s;
}
}
A) -7
B) Hello
C) Serialization
D) deserialization
ANS) deserialization
QUESTION 62
What will be the result of compiling and run the
following code:
import java.io.File;
public class Test {
 public static void main(String... args) throws Exception {
  File myDir = new File("test");
  // myDir.mkdir();
```

```
File myFile = new File(
                           myDir, "test.txt");
 myFile.createNewFile();
}}
A) create directory "test" and a file name as "test.txt
B) java.io.IOException
C) Compile with error
D) None of the above
ANS) java.io.IOException
QUESTION 63
What is the output of the below snippet code:
File f = new File("D:\\workspace\\DemoPrograms\\samplefile.txt");
 System.out.println(f.getAbsolutePath());
A) D:\\workspace\\DemoPrograms\\samplefile.txt
B) D:\workspace\DemoPrograms\samplefile.txt
C) workspace\DemoPrograms\samplefile.txt
D) workspace\\DemoPrograms\\samplefile.txt
ANS) D:\workspace\DemoPrograms\samplefile.txt
QUESTION 64
What is the output for the below code?
public class A {
public A() {
System.out.println("A")
}}
public class B extends A implements Serializable {
public B() {
System.out.println("B")
}}
public class Test {
public static void main(String... args) throws Exception {
Bb = new B()
ObjectOutputStream save = new ObjectOutputStream(new
FileOutputStream("datafile"))
```

```
save.writeObject(b)
save.flush()
ObjectInputStream restore = new ObjectInputStream(new
FileInputStream("datafile"))
B z = (B) restore.readObject()
}}
A) ABAB
B) A B
C) B A B
D) ABA
ANS) ABA
QUESTION 65
What is the ouput of the below code:
import java.io.*;
  class Chararrayinput {
     public static void main(String[] args) {
   String obj = "abcdef";
       int length = obj.length();
       char c[] = new char[length];
       obj.getChars(0, length, c, 0);
       CharArrayReader input1 = new CharArrayReader(c);
       CharArrayReader input2 = new CharArrayReader(c, 0, 3);
       int i;
       try {
 while((i = input2.read()) != -1) {
            System.out.print((char)i);
          }
       }
       catch (IOException e) {
          e.printStackTrace();
  }
}
  }
A) abc
B) abcd
C) abcde
```

```
D) abcdef
ANS) abc
QUESTION 66
Which of the following code retrieves the body of the request as binary data?
A - new InputStream()
B - response.getInputStream()
C - request.getInputStream()
D - None of the above.
A) A
B) B
C) C
D) D
ANS) C
QUESTION 67
class MyThread implements Runnable {
public void run(){
System.out.println("Running MyThread");
}// end of MyThread
class YourThread extends Thread {
public YourThread(Runnable r) {
super(r);
}
public void run(){
System.out.println("Running YourThread");
}// end of YourThread
public class Test {
```

```
public static void main(String args[]) {
 MyThread t1 = new MyThread();
 YourThread t2 = new YourThread(t1);
 t2.start();
}
What will be the ouput of the above Code?
A) Running MyThread
B) Running YourThread
C) Running MyThread
Running YourThread
D) Compilation fails
E) Runtime error
ANS) Running YourThread
QUESTION 68
public class Test {
public static void main (String[] args) { new Test().go();
}
public void go() {
Runnable r = new Runnable() { public void run() { System.out.print("foo"); }
};
Thread t = new Thread(r);
t.start();
t.start(); } }
What is the result?
A) An exception is thrown at runtime.
B) Compilation fails.
C) The code executes normally and prints "foo".
D) The code executes normally, but nothing is printed.
ANS) An exception is thrown at runtime.
QUESTION 69
What is the output of the below code:
```

```
class Test extends Thread{
public static void main(String[] args) {
 Test t = new Test();
 t.setName("Thread 0");
 t.start();
}
public void run(){
 System.out.println(Thread.currentThread().getName());
}
A) Thread 0
B) main
Thread 0
C) Compilation error
D) Runtime error
ANS) Thread 0
QUESTION 70
What is the output of the below code:
class Test{
public static void main(String[] args) {
 new Thread(new Runnable() {
 @Override
   public void run() {
        System.out.println("Thread running");
      }
 }).start();
}
}
A) Thread running
B) No output
C) Compilation error
D) Runtime error
ANS) Thread running
```

```
What is the output of the below code:
class Test{
public static void main(String[] args) {
Thread t = new Thread();
System.out.println(t.currentThread().getPriority());
}
}
A) 1
B) 3
C) 5
D) 7
ANS) 5
QUESTION 72
What is the output of the below code:
public class Test {
public static void main(String[] args){
 System.out.println(Thread.currentThread().getName());
}
A) mainthread
B) Thread
C) main
D) currentThread
ANS) main
QUESTION 73
What will be the output of the program?
class MyThread extends Thread{
MyThread(){}
MyThread(Runnable r){
super();}
```

```
public void run(){
System.out.println("Inside Thread");
}}
class MyRunnable implements Runnable{
public void run(){
System.out.println("Inside Runnable");
}}
class Test{
public static void main(String[] args){
new MyThread().start();
new MyThread(new MyRunnable()).start();
}
}
A) Inside Thread
Inside Thread
B) Inside Thread
Inside Runnable
C) Does Not compile
D) Throw Exception at runtime
ANS) Inside Thread
Inside Thread
QUESTION 74
Which methods belong to Thread Class
a. wait()
b. run()
c. start()
d. notify
e. notifyAll()
f. interrupt()
A) a,b,d
B) c,d,e,f
C) b,c,f
D) b,d,e,f
ANS) b,c,f
```

QUESTION 75
Assume the following method is properly synchronized and called from a thread A on an object B wait(2000);
After calling this method, when will the thread A become a candidate to get another turn at the CPU?
A) Two seconds after thread A is notified
B) After thread A is notified or after two seconds
C) Two seconds after lock B is released
D) After the lock on B is released or after two seconds
ANS) After thread A is notified or after two seconds
QUESTION 76
 Given:
1. import java.util.*
2. public class WrappedString {
3. private String s
4. public WrappedString(String s) { this.s = s }
5. public static void main(String[] args) {
6. HashSet hs = new HashSet()
7. WrappedString ws1 = new WrappedString("aardvark")
8. WrappedString ws2 = new WrappedString("aardvark")
9. String s1 = new String("aardvark")
10. String s2 = new String("aardvark")
11. hs.add(ws1) hs.add(ws2) hs.add(s1) hs.add(s2)
12. System.out.println(hs.size()) } }
What is the result?
A) 1
B) 2
C) 3
D) 4
ANS) 3

QUESTION 77

A programmer has an algorithm that requires a java.util.List that provides an efficient implementation of add(0, object), but does NOT need to support quick random access.
What
supports these requirements?
A. java.util.Queue
B. java.util.ArrayList
C. java.util.LinearList
D. java.util.LinkedList
A) A
B) B
C) C
D) D
ANS) D
QUESTION 78
Given:
34. HashMap props = new HashMap();
35. props.put("key45", "some value");
36. props.put("key12", "some other value");
37. props.put("key39", "yet another value");
38. Set s = props.keySet();
39. // insert code here What, inserted at line 39, will sort the keys in the props
HashMap?
A. Arrays.sort(s);
B. s = new TreeSet(s); C. Collections.sort(s);
D. s = new SortedSet(s);
A) A
B) B
C) C
D) D
ANS) B

QUESTION 79

```
Given:
import java.util.ArrayList;
class Test{
public static void main(String[] args) {
 ArrayList<String> m = new ArrayList<String>();
 m.add("some string");//line3
 m.add(54);//line4
 m.add(new ArrayList<Integer>().add(70));//line5
 m.add(new ArrayList<String>().add("some string"));//line6
}
}
A) Compilation fails at line3
B) Compilation fails at line4
C) Compilation fails at line5
D) Compilation fails at line6
ANS) Compilation fails at line4
QUESTION 80
What is the output for the below code?
import java.util.LinkedList;
import java.util.Queue;
public class Test {
public static void main(String... args) {
 Queue q = new LinkedList();
      q.add("newyork");
      q.add("ca");
      q.add("texas");
      show(q);
   public static void show(Queue q) {
      q.add(new Integer(11));
      while (!q.isEmpty ())
         System.out.print(q.poll() + " ");
   }
}
```

```
B) ca newyork texas 11
C) 11 texas ca newyork
D) Compile error: Integer can't add
ANS) newyork ca texas 11
QUESTION 81
What is the output for the below code?
public class Test {
  public static void main(String argv[]){
   ArrayList list = new ArrayList();
   ArrayList listStr = list;
   ArrayList listBuf = list;
   listStr.add(0, "Hello");
   StringBuffer buff = (StringBuffer) listBuf.get(0);;
    System.out.println(buff.toString());
  }}
A) Hello
B) Compile time error
C) java.lang.ClassCastException
D) null
ANS) java.lang.ClassCastException
QUESTION 82
What is the output of below code?
public class Bean{
private String str
Bean(String str){
this.str = str
}
public String getStr() {
return str
public boolean equals(Object o){
if (!(o instanceof Bean)) {
return false
```

```
}
return ((Bean) o).getStr().equals(str)
public int hashCode() {
return 12345
public String toString() {
return str
}
import java.util.HashSet
public class Test {
public static void main(String ... sss) {
HashSet myMap = new HashSet()
String s1 = new String("das")
String s2 = new String("das")
Bean s3 = new Bean("abcdef")
Bean s4 = new Bean("abcdef")
myMap.add(s1)
myMap.add(s2)
myMap.add(s3)
myMap.add(s4)
System.out.println(myMap)
}
A) das abcdef
B) das abcdef das abcdef
C) das das abcdef abcdef
D) das
ANS) das abcdef
QUESTION 83
What is the output of the below code:
import java.util.*;
   class genericstack <E> {
     Stack <E> stk = new Stack <E>();
public void push(E obj) {
       stk.push(obj);
```

```
}
public E pop() {
       E obj = stk.pop();
   return obj;
}
  }
  public class Test {
     public static void main(String args[]) {
       genericstack <String> gs1 = new genericstack<String>();
       gs1.push("Hello");
       System.out.print(gs1.pop() + " ");
       genericstack <Integer> gs2 = new genericstack<Integer>();
       gs2.push(36);
       System.out.println(gs2.pop());
     }
  }
A) Hello
B) 36
C) compile time error
D) run time error
E) Hello 36
ANS) Hello 36
QUESTION 84
What is the output of the below code:
public class Test {
public static void main(String[] args) {
List<String> list = new ArrayList();
list.add("test");
list.add(123);
list.add('c');
System.out.println(list);
}
}
A) [test,123,c]
B) No output
C) compilation fails
```

D) Runtime error

ANS) Compilation fails

```
QUESTION 85
```

2

```
What is the output of the below code?
public class Test {
public static void main(String[] args) {
 List<Integer> list = new ArrayList<Integer>();
 list.add(9);
 list.add(8);
 list.add(2);
 list.add(5);
 list.add(1);
 Iterator itr = list.iterator();
 Collections.reverse(list);
 Collections.sort(list);
 while(itr.hasNext()){
  System.out.println(itr.next());
 }
}
}
A) 9
8
2
5
1
B) 1
5
2
8
9
C) 1
2
5
8
9
D) 1
```

```
9
8
5
ANS) 1
2
5
8
9
QUESTION 86
Whats is the output of the below code:
class Test extends Thread{
public static void main(String[] args) {
 Vector v = new Vector(3,2);
 v.add("data 1");
 v.add("data 2");
 v.add("data 3");
 v.removeAll(v);
 System.out.println(v.isEmpty());
}
}
A) true
B) false
C) comiplation fails
D) Runtime error
ANS) true
QUESTION 87
Which collection class allows you to associate its elements with key values, and allows you to
retrieve objects in FIFO (first-in, first-out) sequence?
A) java.util.ArrayList
```

B) java.util.LinkedHashMap

C) java.util.HashMapD) java.util.TreeMap

```
QUESTION 88
What is the output of the below code:
class Test{
 public static void main(String[] args) {
 Stack<String> data = new Stack();
 data.add("test");
 data.add("hello");
 data.add(123);
 System.out.println(data);
}
}
A) test
hello
123
B) test
hello
C) Compilation fails
D) run time error
ANS) Compilation fails
QUESTION 89
class Test{
public static void main(String[] args) {
 HashMap map = new HashMap();
 map.put(null, "one");
 map.put(null,"two");
 map.put(3, "three");
 map.put(4, "four");
 Iterator entries = map.entrySet().iterator();
 while(entries.hasNext()){
  Map.Entry entry = (Map.Entry) entries.next();
  System.out.println("key "+entry.getKey()+" value "+entry.getValue());
```

```
}
}
}
What is the ouput of the above code?
A) key null value null
key null value two
key 3 value three
key 4 value four
B) key null value one two
key 3 value three
key 4 value four
C) key null value two
key 3 value three
key 4 value four
D) None of the above
ANS) key null value two
key 3 value three
key 4 value four
QUESTION 90
class Test {
 public static void main(String[] args) {
List<Object> list = new ArrayList<String>();/*error at line 3*/
list.add("test");/*error at line 4*/
list.add(new Integer(1));/*error at line 5*/
list.add(new Double(1.23223));/*error at line 6*/
list.add(12.3f);/*error at line 7*/
  }
}
A) test
1
1.23223
12.3
B) Error at line 3
C) Error at line 4
D) Error at line 5
E) Error at line 6
```

```
QUESTION 91
 -----
What is the output of the below code:
public class Test {
 public static void main(String[] args) {
 List<Integer> list = new ArrayList<Integer>();
 list.add(9);
 list.add(8);
 list.add(2);
 list.add(1);
 Collections.reverse(list);
 Collections.sort(list);
 Iterator itr = list.iterator();
 Collections.shuffle(list);
 while(itr.hasNext()){
  System.out.println(itr.next());
 }
}
A) 9821
B) 1289
C) 2918
D) Non-Predicatable
ANS) Non-Predicatable
QUESTION 92
Given the code fragment:

    ArrayList<Integer> list = new ArrayList<>(1);

2. list.add(1001);
3. list.add(1002);
System.out.println(list.get(list.size()));
What is the result?
```

A) Compilation fails due to an error on line 1.

C) Anexception is thrown at run time due to error on line 4 D) 1001 1002
ANS) Anexception is thrown at run time due to error on line 4
QUESTION 93
ResultSet is Updatable by default(true or false)
A) true B) false
ANS) false
QUESTION 94
Which isolation level prevents only dirty read in JDBC, connection class. A) TRANSACTION_READ_UNCOMMITTED B) TRANSACTION_READ_ COMMITTED C) TRANSACTION_SERIALIZABLE D) TRANSACTION_REPEATABLE_READ
A) A B) B C) C D) D
ANS) B
QUESTION 95
Which of the following is correct about rs.absolute(5), where rs is a reference of ResultSet?
A) Move cursor to fifth row from the end of the resultset B) Move cursor to the fifth row C) Move cursor to the sixth row

D) runtime error

B) An exception is thrown at run time due to error on line 3

ANS) Move cursor to the fifth row
QUESTION 96
Re arrange the steps in a correct order to execute a ResultSet?
A. Processing the ResultSet
B. Connecting to database
C. Executing the SQL Query
D. Registering the driver
A) C>B>A
B) C>A>A
C) D>B>C
D) B>C>A
ANS) D>B>C>A
QUESTION 97
For executing a sql query multiple times, PreparedStatement provides better performance than Statement object?
A) true
B) false
ANS) true
QUESTION 98
Which Statement method allows us to execute dynamic sql queries, and returns boolean value
A. executeUpdate();
B. executeQuery();
C. execute();
A \ A
A) A B) B
C) C
-, -

```
QUESTION 99
public class JDBCDemo {
public static void main(String[] args) {
 String sql = "select * from employee";
 try{
 Class.forName("oracle.jdbc.driver.OracleDriver");
 Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE","HR","HR");
 Statement st = con.createStatement();
 ResultSet rs = st.executeQuery(sql);
 while(rs.next()){
 System.out.println(rs.getInt(0));
 }
 }
 catch(ClassNotFoundException |SQLException e){
 System.out.println(e.getMessage());
 }
}
}
A) null
B) No Data Found
C) Compilation fails
D) Invalid column index
ANS) Invalid column index
QUESTION 100
Which Exceptions should be replaced by ? for the code to compile?
class Test{
public static void main(String args[]) throws {
try{
 Class.forName("oracle.jdbc.OracleDriver");
 Connection con = DriverManager.getConnection(
          "jdbc:oracle:oci8:@/localhost:1521/XE", "hr", "hr");
}
```

catch(? e){ } catch(? e){ }
}
}
A) ClassNotFoundException,SQLException
B) ClassCastException,SQLException
C) Exception, SQLException
D) ClassCastException,ClassNotFoundException
ANS) ClassNotFoundException,SQLException
QUESTION 101
What happens if you call deleteRow() on a ResultSet object?
[A] The row you are positioned on is deleted from the ResultSet, but not from the database.
[B] The row you are positioned on is deleted from the ResultSet and from the database
[C] The result depends on whether the property synchronizeWithDataSource is set to true or false
[D] You will get a compile error: the method does not exist because you can not delete rows from
a ResultSet
A) A
B) B
C) C
D) D
ANS) B
What happens if you call the method close() on a ResultSet object?
[A] the method close() does not exist for a ResultSet. Only Connections can be closed.
[B] the database and JDBC resources are released
[C] you will get a SQLException, because only Statement objects can close ResultSets
[D] the ResultSet, together with the Statement which created it and the Connection from which the

Statement was retrieved, will be closed and release all database and JDBC resources

A) A
B) B
C) C
D) D
ANS) B
QUESTION 103
Which of the following Interface provides method for finding the maximum number of connections that a specific driver can obtain?
A. Database
B. Connection
C. DatabaseMetaData
D. ResultSetMetaData
A) A
B) B
C) C
D) D
ANS) C
QUESTION 104
How can you execute a stored procedure in the database?
A) Call method execute() on a CallableStatement object
B) Call method executeProcedure() on a Statement object
C) Call method execute() on a StoredProcedure object
D) Call method run() on a ProcedureCommand object
ANS) Call method execute() on a CallableStatement object
QUESTION 105
Which type of Statement can execute parameterized queries?

A) PreparedStatement
B) ParameterizedStatement
C) ParameterizedStatement and CallableStatement
D) All kinds of Statements
ANS) PreparedStatement
QUESTION 106
DriverManager.getConnection()? Fill up the blank.
A) getConnection(String url)
B) getConnection(String url, Properties info)
C) getConnection(String url, String user, String password)
D) All of the above mentioned
ANS) All of the above mentioned
setAutoCommit(boolean autoCommit) is method of Interface
A) ResultSet
B) Connection
C) Statement
D) HttpSession
ANS) Connection
QUESTION 108
Which result set generally does not show changes to the underlying database that are made while it is open. The membership, order, and column values of rows are typically fixed when the result set is created?
A) TYPE_FORWARD_ONLY

B) TYPE_SCROLL_INSENSITIVE

C) TYPE_SCROLL_SENSITIVE D) ALL MENTIONED ABOVE
ANS) TYPE_SCROLL_INSENSITIVE
QUESTION 109
Which type of ResultSet can be navigated in both directions and will reflect the changes made to the underlying data in the Database?
A) TYPE_FORWARD_ONLY B) TYPE_SCROLL_INSENSITIVE C) TYPE_SCROLL_SENSITIVE D) ALL MENTIONED ABOVE
ANS) TYPE_SCROLL_SENSITIVE
QUESTION 110
If conn is the Connection Object, What will happen if the following line of code gets executed: conn.setAutoCommit(false);
A) SQL statement is treated as a transaction and is automatically committed B) SQL statement is treated as a transaction and manually needs to be committed C) both a & b D) none of the above
ANS) SQL statement is treated as a transaction and manually needs to be committed
QUESTION 111
AutoCommit, rollback,Savepoint all this methods belong to
A) DriverManager B) Connection Interface C) Statement D) ResultSet

ANS) Connection Interface

QUESTION 112
Which method of ResultSet can be used to jump to the third row in the database"
A) rs.next(3)
B) rs.moveTo(3)
C) rs.getXXX(3)
D) rs.absolute(3)
E) none of the above
ANS) rs.absolute(3)
QUESTION 113
How to get Warning from Statement?
A) getWarnings()
B) getWarningsFromStatement()
C) getNextWarning()
D) None of the above mentioned
ANS) getWarnings()
QUESTION 114
Which type of driver converts JDBC calls into the network protocol used by the database management system directly?
A) Type 1 driver
B) Type 2 driver
C) Type 3 driver
D) Type 4 driver
ANS) Type 4 driver
QUESTION 115

How can you retrieve information from a ResultSet?	
--	--

- A) By invoking the method get(..., String type) on the ResultSet, where type is the database type
- B) By invoking the method get(..., Type type) on the ResultSet, where Type is an object which represents a database type
- C) By invoking the method getValue(...), and cast the result to the desired Java type.
- D) By invoking the special getter methods on the ResultSet: getString(...), getBoolean (...), getClob(...)

ANS) By invoking the special getter methods on the ResultSet: getString(...), getBoolean (...), getClob(...)

QUESTION 116

Choose the incorrect option for Singleton pattern

- A) Provide a default Private constructor.
- B) Define a static Private object instance.
- C) The client should be independent of how the products are created
- D) Make the access method synchronized to prevent Thread problems.
- E) Override the object clone method to prevent cloning.
- A) A
- B) B
- C) C
- D) D
- E) E

ANS) C

QUESTION 117

Choose the incorrect statement about SingleThreadModel.

- A. It is used to ensure that servlet can handle only one request at a time.
- B. It is a marker interface
- C. It solves all the thread-safety issues
- A) A
- B) B
- C) C

ANS) C
QUESTION 118
Design Pattern in which we separate abstraction and its implementation?
A) Decorator Pattern B) Adapter Pattern
C) Bridge Pattern
D) Creational Pattern
ANS) Bridge Pattern
QUESTION 119
In the Publish-Subscribe messaging model, the subscribers register themselves in a topic and are notified when new messages arrive to the topic. Which pattern does most describe this model?
A) Adapter
B) Notifier
C) Observer
D) State
ANS) Observer
QUESTION 120
It is known as Action or Transaction and is used to encapsulate a request as an object to support rollback,
logging, or transaction functionality
A) Chain of Responsibility Pattern
B) Command Pattern
C) Observer Pattern
D) Strategy Pattern
ANS) Command Pattern

QUESTION 121
Iterator Pattern is a type of
A) Creational Patterns B) Behavioral Patterns C) Structural Patterns
ANS) Behavioral Patterns
QUESTION 122
What are the consequences of applying the abstract factory pattern? A. it will be much easier to introduce new family of products B. it makes it easier for a certain family of objects to work together C. it makes it easier for the client to deal with tree-structured data D. it makes the designed product families exchangeable A) A,C B) C,D C) B,D D) D,A ANS) B,D
QUESTION 123
When would you use the Singleton design pattern? A. to limit the class instantiation to one object B. to provide global access to one instance across the system C. to ensure that a certain group of related objects are used together D. to abstract steps of construction of complex objects
A) A B) A,B C) A,B,C D) A,B,D

ANS) A,B

QUESTION 124
Which Design Pattern provides a way to access the elements of an aggregate object sequentially without exposing its underlying representation.
A) Iterator
B) Command
C) Observer
D) Strategy
ANS) Iterator
Which design pattern you would you use to decouple the creation procedure of a complex object
from it's concrete
instance to be able to apply that procedure on variety of implementations.
A) Factory builder design pattern
B) Method Builder design pattern
C) Builder design pattern
D) Factory method design pattern
ANS) Builder design pattern
Which design pattern you would you use to limit the class instantiation to one object?
A) Builder design pattern
B) Factory Method Design Pattern
C) Prototype design pattern
D) Singleton design pattern
ANS) Singleton design pattern

Which of the following pattern works as a bridge between two incompatible interfaces?
A - Builder Pattern
B - Adapter Pattern
C - Prototype Pattern
D - Filter Pattern
A) A B) B C) C D) D
ANS) B
QUESTION 128
You want to create families of related objects, to be used interchangeably to configure you application. What is the most appropriate pattern to use?
A) Factory B) Builder C) Abstract Factory D) Composite
B) Builder C) Abstract Factory
B) Builder C) Abstract Factory D) Composite

A) A B) B

C) C D) D
ANS) C
QUESTION 130
In Junit @Rule TestName is invoked when
A) to mark public fields of a test classB) test is about to startC) test method is running.D) All of the above
ANS) test is about to start
QUESTION 131
public class ArrayTest { int[] one; int[] two; @Before public void first(){one= new int[]{1,2}; two= new int[]{1,2};}
<pre>@Test public void test() { assertArrayEquals(one, two);} } What is the result of executing the above JUnit Test?</pre>
A) Test fails as references of both the arrays are not equal B) Test passes C) Compilation fails as there is no method assertArrayEquals in Junit D) Runtime exception occurs
ANS) Test passes
QUESTION 132
class Test{

```
public static void main(String[] args) {
 int a=6,b=12;
 for(int i=0; i<3; i++){
 a++;b--;
 if(a>b){}
  System.out.println("line of code");
 }
 else{
  System.out.println("else block");
 }
 }
}
}
How many times "line of code" will execute ?
A) 0 times
B) 1 time
C) 2 times
D) 3 times
E) Compilation fails
ANS) 0 times
QUESTION 133
```

A team of programmer is involved in reviewing a proposed design for a new utility class. After some discussion, they realize that the current design allows other classes to access methods in the utility class that should be accessible only to methods within the utility class itself. What design issue has the team discovered?

- A) Tight Coupling
- B) Low cohesion
- C) Loose Coupling
- D) Weak Encapsulation

ANS) Weak Encapsulation

QUESTION 134

class Animal { public String noise() { return "peep"; } }

```
class Dog extends Animal {
public String noise() { return "bark"; }
}
class Cat extends Animal {
public String noise() { return "meow"; }
}
class Test{
 public static void main(String[] args) {
 Animal animal = new Dog();
 Cat cat = (Cat)animal;
 System.out.println(cat.noise());
 }
}
What is the output of the above code?
A) peep
B) bark
C) meow
D) Compilation fails.
E) An exception is thrown at runtime
ANS) An exception is thrown at runtime
QUESTION 135
class Animal
 String name = "animal";
 String makeNoise() { return "generic noise"; }
}
class Dog extends Animal
{
 String name = "dog";
 String makeNoise() { return "bark"; }
}
public class Test
 public static void main(String[] args)
 {
 Animal an = new Dog();
 System.out.println(an.name+" "+an.makeNoise());
```

```
}
}
A) animal generic noise
B) animal bark
C) dog bark
D) dog generic noise
ANS) animal bark
QUESTION 136
How is an abstract class represented in a class diagram?
A) Class Name is Underlined
B) Class Name is in Italics
C) Class Name is in Bold
D) Class Name is in uppercase
ANS) Class Name is in Italics
QUESTION 137
What is the output of the below code:
interface A{
void method();
class Test{
public void method(){
 System.out.println("call from a method");
}
public static void main(String[] args) {
 A = (A) \text{ new Test()};
 a.method();
}
}
A) call from a method
B) No ouput at console
C) Compilation fails
```

ANS) Exception is thrown at Runtime **QUESTION 138** abstract class MyClass{ abstract int m(); } interface MyInterface{ public int m(); public class Test extends MyClass implements MyInterface{ //code to execute Which of the following lines will allow the code to execute the program? A) int m(){} int m(){} B) int m(){} int MyInterface.m(){} C) int m(){} D) None of the above ANS) int m(){} **QUESTION 139** What is the output for the below code? public interface TestInf { int i = 10; public class Test { public static void main(String... args) { TestInf.i=12; System.out.println(TestInf.i); }

D) Exception is thrown at Runtime

B) 12
C) compile time error
D) run time error
ANS) compile time error
QUESTION 140
Which Man class properly represents the relationship "Man has a best friend who is a Dog"?
A) class Man extends Dog { }
B) class Man implements Dog { }
C) class Man { private BestFriend dog; }
D) class Man { private Dog bestFriend; }
E) class Man { private Dog <bestfriend>; }</bestfriend>
ANS) class Man { private Dog bestFriend; }
OUECTION 4.44
QUESTION 141
Given:
10. interface Jumper { public void jump(); }
20. class Animal {}
30. class Dog extends Animal {
31. Tail tail; 32. }
40. class Beagle extends Dog implements Jumper{
41. public void jump() {}
42. }
50. class Cat implements Jumper{
51. public void jump() {}
52. }
Which three are true? (Choose three.)
A. Cat is-a Animal
B. Cat is-a Jumper
C. Dog is-a Animal
D. Dog is-a Jumper
E. Cat has-a Animal
F. Beagle has-a Tail
G. Beagle has-a Jumper

```
A) A,B,D
B) AF,G
C) B,F,G
D) B,C,F
E) E,F,G
ANS) B,C,F
QUESTION 142
_____
What is the output of the below code:
interface I1{
int m1();
}
class Test{
public static void main(String[] args) {
 System.out.println(new I1(){
 public int m1() {
  return 2;
 }
 });
}
}
A) 2
B) Class Name appended with hashcode
C) Compilation fails
D) Run time error
ANS) Class Name appended with hashcode
QUESTION 143
Given:
class One{
public One method(){
 return this;
}
}
class Two extends One{
```

```
public Two method(){
 return this;
}
}
public class DemoProgram extends Two{
//Expected Code Here
}
A) public void method(){
}
B) public int method(){
 return 3;
}
C) public One method(){
 return this;
}
D) public Two method(){
 return this;
}
ANS) public Two method(){
 return this;
}
QUESTION 144
class Parent{
void method(){
 System.out.println("Parent");
}
}
class Child extends Parent{
void method(){
 System.out.println("Child");
}
public static void main(String[] args) {
 Parent p = new Parent();
 Child c = (Child)p;
 c.method();
}
```

```
}
A) Child
B) Parent
C) Compilation fails
D) ClassCastException thrown at runtime
ANS) ClassCastException thrown at runtime
QUESTION 145
Given:
interface A{}
class C{}
class D extends C{}
public class Test extends D{
public static void main(String[] args) {
 Test t = new Test();
 if(t instanceof A){
 System.out.println("instance of A");
 }else if(t instanceof C)
 System.out.println("instance of C");
 else if(t instanceof D)
 System.out.println("instance of D");
 }
 else{
 System.out.println("Hello World");
 }
}
}What is the ouput of the below code?
A) instance of A
instance of D
B) instance of C
instance of D
C) instance of C
D) instance of C
```

E) Compilation Fails
ANS) instance of C
QUESTION 146
What is the syntatical error in the below code: abstract class Sum{ abstract abc(int m,int n); }
A) body of the method is missing B) class modifier needs to be changed to public C) method return type is missing D) abstract modifier near the method should be changed to public ANS) method return type is missing
QUESTION 147
What is an actor model?
A) An actor model can represent an external entity which communicates with the systemB) An actor can represent a specific physical entityC) An Actor model can represent a role played by the User.D) All of the above
ANS) All of the above
QUESTION 148
1* can be defined as
A) No limit on the number of instances (including none).B) Zero or one instance. The notation.C) Exactly one instanceD) At least one instance

ANS) At least one instance

QUESTION 149
How to represent an instance in a UML diagram
A) underline
B) slanted line
C) overline
D) Dashed line
ANS) underline
QUESTION 150
In a Sequence diagram, Slanted lines describe
A) Construction of objects
B) Destruction of object
C) Propogation delay of messages
D) order of messages
E) race conditions
ANS) Propogation delay of messages
QUESTION 151
Match the Following for a Component Diagram:
a. Component : 1) Dashed Arrows
b. Dependencies : 2)rectangles with two tabs at the upper left.
C . An Interface to the Component : 3)Circle and solid line
A) a-3
b-1
c-2
B) a-2
b-1
c-3
C) a-1

b-2

c-3
D) a-2
b-3
c-1
ANS) a-2
b-1
c-3
Dog sub class is extending supercalss Mammal, How will represent using UML?
A) Filled diamond on side of the Super class
B) Hollow triangle shape on the superclass end of the line
C) Hollow diamond on
the Collection side
D) Hollow triangle shape on the subclass end of the line
ANS) Hollow triangle shape on the superclass end of the line
QUESTION 153
To send binary output in a response, the following method of HttpServletResponse may be used to get the appropriate Writer/Stream object. Select the one correct answer.
A) getStream
B) getOutputStream
C) getBinaryStream
D) getWriter
ANS) getOutputStream
QUESTION 154
What is the sequence of method execution in Filter?
A)init, doFilter, destroy
B)doFilter, init, destroy
C)destroy, doFilter, init

D)destroy, doFilter
A) A
B) B
C) C
D) D
ANS) A
Which Is the suitable webcomponent to perform tasks like authentication, data compression, logging and auditing?
A) Filter
B) Servlet
C) JSP
D) servlet container
ANS) Filter
QUESTION 156
Which of the following statement is true about servlet filter?
A)A filter is a reusable piece of code that can transform the content of HTTP requests, responses and header information.
B)Filters do not generally create a response or respond to a request as servlets do.
C)Filters can act on dynamic or static content.
D)All of the above
A) A
B) B
C) C
D) D
ANS) D
QUESTION 157

Which three of the following are true about servlet filters?
a)A filter must implement the destroy() b)A filter must implement the doFilter()
c)A servlet may have multiple filters associated with it
d)A servlet that is to have a filter applied to it must implement the javax.servlet.FilterChain
interface
e)A filter that is part of a filter chain passes control to the next filter in the chain by invoking
theFilterChain forward method
A) a,b,c
B) c,d,e
C) b,d,e
D) a,d,e
ANS) a,b,c
QUESTION 158
Which two of the following statements are true?
a)The doFilter method is always invoked by the container, never within a programmers code
b)A filter can be invoked either through being declared in WEB.XML or explicitly within
aprogrammers code c)Filters are associated with a URL via the filter-mapping tag
d)Filters can be initialised via the filter-init-param tag in the deployment descriptor
e)Filters can be initialised via the init-param tag in the deployment descriptor
A) a,c
B) d,e
C) b,e
D) c,e
ANS) c,e
QUESTION 159
interface which provides methods for responding to lifecycle events of a Web Application
A) ServletContextListeners
B) HttpSessionListener

C) ServletRequestListener

D) All of the above
ANS) ServletContextListeners
QUESTION 160
What are the legal methods of HttpServletBindingListener?
A) a)sessionCreated(HttpSessionEvent se) b)sessionDestroyed(HttpSessionEvent se) B) a)sessionDidActivate(HttpSessionEvent se) b)sessionWillPassivate(HttpSessionEvent se) C) a)attributeAdded(HttpSessionBindingEvent event) b)attributeRemoved(HttpSessionBindingEvent event c)attributeReplaced(HttpSessionBindingEvent event) D) a)valueBound(HttpSessionBindingEvent event) b)valueUnbound(HttpSessionBindingEvent event) ANS) a)valueBound(HttpSessionBindingEvent event) b)valueUnbound(HttpSessionBindingEvent event)
Add attribute, Remove attibute, Replace attribute method are implemented from Interface
A) HttpSessionListener B) HttpSessionAttributeListener C) ServletContextListener D) HttpSessionActivationListener ANS) HttpSessionAttributeListener
QUESTION 162
Which Listeners counts the number of user logged in?
A) HttpSessionListener

B) HttpBindingEventListener

C) RequestListener
D) ResponseListener
ANS) HttpSessionListener
QUESTION 163
Which of these is a correct example of specifying a listener element resented by MyClass class. Assume myServlet element is defined correctly. Select the one correct answer. A. a. <listener>MyClass</listener> B. b. clistener> c. clistener> c. clistener> defined correctly. Select the one correct answer. A. defined correctly. Select the one correctly. A. defined correctly. Select the one correctly. A. defined correctly. Select the one correctly. A. defined correctly. Select the on
A) A B) B C) C D) D
ANS) B
QUESTION 164
Which listener help to get the information about the how many user's are available currently?
A) HttpSession B) HttpSessionListener C) Session D) HttpRequest
ANS) HttpSessionListener
QUESTION 165
What is the value of the counter variable in the below code: public class X implements HttpSessionBindingListener { public static int counter;

```
public void valueBound(HttpSessionBindingEvent event) {
counter++;
}
public void valueUnbound(HttpSessionBindingEvent event) {
counter++;
public class TestBinding extends HttpServlet {
public void doGet(HttpServletRequest req, HttpServletResponse res)
throws ServletException, IOException {
HttpSession session = req.getSession();
X x = \text{new } X();
session.setAttribute("name",x);
session.setAttribute("name",new X());
session.setAttribute("test",new X());
session.getAttribute("name");
session.removeAttribute("name");
}
}
A) 2
B) 3
C) 4
D) 5
ANS) 5
```

QUESTION 166

When a session is moved from one JVM and created on another JVM in a distributed environment, Which Listener and method can be used to capture this event of session creation on another JVM and take action?

- A) sessionWillPassivate method of HttpSessionActivationListener
- B) sessionCreated method of HttpSessionListener
- C) attributeAdded method of HttpSessionAttributeListener
- D) sessionDidActivate method of HttpSessionActivationListener

ANS) sessionDidActivate method of HttpSessionActivationListener

.....

QUESTION 167

A user types the URL http://www.manipalglobal.com/ibm/index.html . Which HTTP request gets generated. Choose the correct answer

- A) GET method
- B) POST method
- C) HEAD method
- D) PUT method

ANS) GET method

QUESTION 168

Consider the below form in a HTML page. The Servlet has to add 1 marks to a variable 'marks', if the student selects JAVA in the form. Which code below in the Servlets doPost() method will achieve this?

```
<form method="post" action="Evaluate">
 <h2>Which language is Platform independent</h2>
  <input type="radio" name="Q1" value="C"> C </input>
  <input type="radio" name="Q1" value="C++"> C++ </input>
  <input type="radio" name="Q1" value="JAVA"> JAVA </input>
<input type="submit" value="Submit">
</form>
A) if(request.getAttribute("Q1").equals("JAVA")){marks+=1;
B) if(request.getParameter("Submit").equals("JAVA")){
marks+=1;
C) The form is wrong as you cannot give the same name "Q1" for all three radio buttons
D) if(request.getParameter("Q1").equals("JAVA")){
marks+=1;
ANS) if(request.getParameter("Q1").equals("JAVA")){
marks+=1;
}
```

QUESTION 169

Name the class that has getSession method, that is used to get the HttpSession object.
A) HttpServletRequest
B) HttpServletResponse
C) SessionContext
D) SessionConfig
ANS) HttpServletRequest
QUESTION 170
Which abstract class contains init() and destroy() of a Servlet?
A) javax.servlet.http.HttpServlet
B) javax.servlet.GenericServlet
C) javax.servlet.http.HttpServletRequest
D) javax.servlet.http.HttpServletResponse
ANS) javax.servlet.GenericServlet
QUESTION 171
Which of the following seperator is used to separate the url and query parameter for a Http gerequest?
A) *
B) #
C) ?
D):
ANS) ?
QUESTION 172
The life cycle of a servlet is managed by
A) JSP Engine
B) servlet container
C) WebServer

D) EJB Container	
ANS) servlet container	
QUESTION 173	
The sendRedirect method defined in the HttpServlet class is equivalent to invoking the setStatus method with the following parameter and a Location header in the URL. Select the one correct answer. A) SC_OK B) SC_MOVED_TEMPORARILY C) SC_NOT_FOUND D) SC_INTERNAL_SERVER_ERROR E) ESC_BAD_REQUEST	
A) A B) B C) C D) D E) E	
ANS) B	
QUESTION 174	
What is the output of the below code: @WebServlet("/DemoServlet") public class DemoServlet extends HttpServlet { protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException { doPost(request,response); } protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException { doGet(request,response); } }	
A) No Output offer execution	

- A) No Output after execution
- B) Infinite loop causing "StackOverFlowError"

Which of the following object access sendRedirect() ?
QUESTION 177
ANS) ServletConfig
D) HttpSession
C) HttpRequest
B) ServletContext
A) ServletConfig
Which Interface does not contain setAttribute() and getAttribute()?
QUESTION 176
ANS) No Ouput after execution
D) Runtime error
C) Compilation error
B) Infinite Loop
A) No Ouput after execution
}
}
ServletException, IOException {
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
}
ServletException, IOException {
<pre>public class DemoServlet extends HttpServlet { protected void doGet(HttpServletRequest request, HttpServletResponse response) throws</pre>
@WebServlet("/DemoServlet")
What is the output of the below code:
QUESTION 175
ANS) Infinite loop causing "StackOverFlowError"
D) None of the above
C) Compilation error

A) request
B) response
C) session
D) context
ANS) reponse
QUESTION 178
Which of the following are the session tracking techniques?
A. URL rewriting, using HttpSession object, using response object, using hidden fields B. URL rewriting, using HttpSession object, using cookies, using hidden fields C. URL rewriting, using servlet object, using response object, using cookies D. URL rewriting, using request object, using response object, using session object
A) A B) B C) C D) D
ANS) B
QUESTION 179
Which of the following interfaces has getWriter() method?
A) HttpServletRequest
B) HttpServletResponse
C) ServletRequest
D) ServletResponse
ANS) ServletResponse
QUESTION 180
Which of the following is the correct location of compiled class files within a war file?

1) /META-INF/classes

2) /WEB-INF/bin3) /WEB-INF/bin/classes4) /WEB-INF/classes5) /contextroot/classes
A) 1 B) 2 C) 3 D) 4 E) 5
QUESTION 181
Which of the following protocol is used in servlet? A. http B. https C. none of the above metioned D. both A & B
A) A B) B C) C D) D
ANS) D
QUESTION 182
Servlet Instances are created by ?
A) init() B) constructor C) Servlet Container D) none of the above mentioned ANS) constructor
<i>'</i>

method with the following parameter. Select the one correct answer.
A. SC_OK B. SC_MOVED_TEMPORARILY C. SC_NOT_FOUND D. SC_INTERNAL_SERVER_ERROR
A) A B) B C) C D) D
ANS) C
QUESTION 184
Which of the following is the correct order of servlet life cycle phase methods?
A - init(), service(), destroy()
B - initialize(), service(), destroy()
C - init(), execute(), destroy()
D - init(), service(), delete()
A) A B) B C) C D) D
ANS) A
QUESTION 185
cf command to deploy in load server

The sendError method defined in the HttpServlet class is equivalent to invoking the setStatus

QUESTION 183

A) cf.push
B) cf.publish
C) cf.deploy
D) none of the above
ANS) cf.push
QUESTION 186
A JSP file that uses a tag library must declare the tag library first. The tag library is defined using the taglib directive - @= taglib uri="" prefix=""%
Which of the following specifies the correct purpose of prefix attribute. Select the one correct answer.
1. The prefix defines the name of the tag that may be used for a tag library.
2. The prefix attribute defines the location of the tag library descriptor file.
3. The prefix attribute should refer to the short name attribute of the tag library file that is defined
by the uri attribute of taglib directive.
4. The prefix must be defined in the taglib directive and used in front of the tagname of a tag
A) 1
B) 2
C) 3
D) 4
ANS) 4
QUESTION 187
Steps for creating a Custom tag(Re-arrange)
A. Package Tag Handlers and TLD file into tag library
B. Write TLD file
C. Write Tag Handlers
D. Reference the TLD in the web-app deployment descriptor
A) A,B,D,C
B) D,C,B,A
C) B,C,A,D
D) A,C,D,B,

ANS) B,C,A,D
QUESTION 188
What gets printed when the following expression is evaluated? Select the one correct answer. \${"5" + "4"+6+8}
A) 5414
B) 5468 C) 23
D) 518
ANS) 23
What gets printed when the following expression is evaluated? Select the one correct answer.\${12 % 4}
A) 0
B) 3
C) 8
D) 16
ANS) 0
What gets printed when the following expression is evaluated? Select the one correct answer.\${4
div 5}
a. 0
b. 0.8 c. 1
d1
A) a
B) b
C) c
D) d

ANS) b
QUESTION 191
What gets printed when the following expression is evaluated? Select the one correct answe \${(1==2) ? 4 : 5}
A) 1
B) 2
C) 4
D) 5
ANS) 5
QUESTION 192
What gets printed when the following code in a JSP is executed
<% int y = 0; $%>$
<% int z = 0; %>
<% for(int x=0;x<3;x++) { %>
<% z;++y;%>
<% }%>
<% if(z <y) {%=""></y)>
<%= z%>
<% } else {%>
<%= z - 1%>
<% }%>
A) 3
B) -1
C) 2
D) -3
E) generates compilation error
ANS) -3

QUESTION 193

What gets printed when the following JSP code is invoked in a browser. Select the one correct answer.

```
<%= if(Math.random() < 0.5) %>
hello
<%= } else { %>
hi
<%= } %>
```

- A) The browser will print either hello or hi based upon the return value of random.
- B) The string hello will always get printed.
- C) The string hi will always get printed.
- D) The JSP file will not compile.

ANS) The JSP file will not compile.

QUESTION 194

When using HTML forms which of the following is true for POST method? Select the one correct answer.

- A. POST allows users to bookmark URLs with parameters.
- B. The POST method should not be used when large amount of data needs to be transferred.
- C. POST allows secure data transmission over the http method.
- D. POST method sends data in the body of the request.
- A) A
- B) B
- C) C
- D) D

ANS) D

QUESTION 195

Which of the following represents the XML equivalent of this statement

< @ include file="index.jsp" %>

Select the one correct statement

A) <jsp:include file="index.jsp"></jsp:include>
B) <jsp:include page="index.jsp"></jsp:include>
C) <jsp:directive.include file="index.jsp"></jsp:directive.include>
D) There is no XML equivalent of include directive.
ANS) <jsp:include page="index.jsp"></jsp:include>
QUESTION 196
Authentication can be done by
A) Basic
B) Form-Based
C) Digest
D) All of the above
E) none of the above
ANS) All of the above
Choose the approriate way to synchronize static form contents with jsp?
A) <jsp:setproperty name="bean" property="username"></jsp:setproperty>
B) <jsp:setproperty name="bean" property="*"></jsp:setproperty>
C) <jsp:setproperty name="bean" value="test"></jsp:setproperty>
D) None of the above
ANS) <jsp:setproperty name="bean" property="*"></jsp:setproperty>
A bean with a property color is loaded using the following statement
<jsp:usebean class="Fruit" id="fruit"></jsp:usebean>
What happens when the following statement is executed. Select the one correct answer. <jsp:setproperty name="fruit" property="*"></jsp:setproperty>
A)This is incorrect syntax of <jsp:setproperty></jsp:setproperty> and will generate a compilation error. Either value or param must be defined.

B)All the properties of the fruit bean are initialized to a value of null.

If in test.jsp \\${3+2-1}: \${3+2-1}
What is the output?
A) \${3+2-1} : 4
B) \\${3+2-1} : 4
C) \\${4}: 4
D) \${4} : 4
ANS) \${3+2-1} : 4
QUESTION 201
What are the attribute names to be specified for the tag below
<%@ taglib="http://java.sun.com/jsp/jstl/core"="c" %>
A) url,uri
B) uri,suffix
C) uri,prefix
D) None of the above
ANS) uri,prefix
QUESTION 202
What gets printed when the following JSTL code fragment is executed? Select the one correct answer.
<@@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:set value="2" var="item"></c:set>
<c:foreach begin="0" end="0" step="2" var="item"></c:foreach>
<c:out default="abc" value=""></c:out>
A) The JSTL code does not compile as an attribute for forEach tag is not correct.
B) 0
C) 2
D) ABC E) Nothing gets printed.
—/ · · - · · · · · · · · · · · · · · · ·

Which numbers gets printed when the following JSTL code fragment is executed? Select the		
QUESTION 205		
ANS) 0		
E) code does not compile		
D) 3		
C) 2		
B) 1		
A) 0		
<pre><c:out default="abc" value="\${status.index}"></c:out></pre>		
<c.ioreach items="\$\(\pi\)" var="item" varstatus="status"> <c:if test="\${\status.first}"></c:if></c.ioreach>		
<c:set value="4,3,2,1" var="j"></c:set> <c:foreach items="\${j}" var="item" varstatus="status"></c:foreach>		
<pre><%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %> <pre></pre></pre>		
What is the output of the below code:		
QUESTION 204		
ANS) 0 2 4 6 8		
D) 0 2 4 6 8 9		
B) 1 3 5 7 9 C) 0 2 4 6 8		
A) 123456789		
\${item}		
<pre><%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %> <c:foreach begin="0" end="9" step="2" var="item"></c:foreach></pre>		
What is the output of the below code:		
QUESTION 203		
ANS) Nothing gets printed.		

correct answer.

D) Run time error

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:set var="j" value="4,3,2,1"/>
<c:forEach items="${j}" var="item" begin="1" end="2" varStatus="status">
<c:out value="${status.count}" default="abc"/>
</c:forEach>
A. 1
B. 2
C. 3
D. 4
E. The program does not compile.
A) A,B
B) B,C
C) A,C
D) D,E
E) C,D,E
ANS) A,B
QUESTION 206
What is the output of the below code:
<c:forTokens items="One,Two,Three,Four.Five.Six" delims="," var="data">
   <c:out value="${data}"/><br/>
</c:forTokens>
A) One
Two
Three
Four.Five.Six
B) One
Two
Three
Four
Five
Six
C) Compilation fails
```

ANS) One Two
Three
Four.Five.Six
QUESTION 207
What is the output of the below code
<pre><c:fortokens begin="0" delims="," end="4" items="a,b,c,d,e" step="2" var="character"> <c:out value="\${character}"></c:out></c:fortokens></pre>
A) c
d
e
В) а
d
e
C) a
С
e e
D) b
d
e
ANS) a
c
e
