**E-PRACTO TECHINICAL TEST - 1**

**Question 1**

Suppose that you would like to create an instance of a new Map that has an iteration order that is the same as the iteration order of an existing instance of a Map. Which concrete implementation of the Map interface should be used for the new instance?

1. TreeMap
2. HashMap
3. LinkedHashMap
4. The answer depends on the implementation of the existing instance

**Answer:- C**

**Question 2**

Which interface provides the capability to store objects using a key-value pair?

1. java.util.List
2. java.util.Map
3. java.util.Collection
4. java.util.Set

**Answer:- B(But provided answer in E-Practo is A)**

**Question 3**

Suppose that you would like to create an instance of a new Map that has an iteration order that is the same as the iteration order of an existing instance of a Map. Which concrete implementation of the Map interface should be used for the new instance?

1. TreeMap
2. HashMap
3. LinkedHashMap
4. The answer depends on the implementation of the existing instance

**Answer:- C**

**Question 4**

Which of the following statements about the hashcode() method are incorrect?

1. The value returned by hashcode() is used in some collection classes to help locate objects.

2. The hashcode() method is required to return a positive int value.

3. The hashcode() method in the String class is the one inherited from Object.

4. Two new empty String objects will produce identical hashcodes

1. 1 and 4
2. 1 and 2
3. 2 and 3
4. 3 and 4

**Answer:- C**

**Question 5**

You need to store elements in a collection that guarantees that no duplicates are stored and all elements can be accessed in natural order. Which interface provides that capability?

1. java.util.List
2. java.util.Collection
3. java.util.Map
4. java.util.Set

**Answer:- D**

**Question 6**

Which three form part of correct array declarations?

1. public int a [ ]

2. static int [ ] a

3. public [ ] int a

4. private int a [3]

5. private int [3] a [ ]

6. public final int [ ] a

1. 1,3,4
2. 2,4,5
3. 1,2,6
4. 2,5,6

**Answer:- C**

**Question 7**

What is the output of this program?

1.        class multidimention\_array {

2.                  public static void main(String args[])

3.                  {

4.                         int arr[][] = new int[3][];

5.                         arr[0] = new int[1];

6.                         arr[1] = new int[2];

7.                         arr[2] = new int[3];

8.                  int sum = 0;

9.                 for (int i = 0; i < 3; ++i)

10.                      for (int j = 0; j < i + 1; ++j)

11.                             arr[i][j] = j + 1;

12.                for (int i = 0; i < 3; ++i)

13.                          for (int j = 0; j < i + 1; ++j)

14.                                  sum + = arr[i][j];

15.                System.out.print(sum);

16.                }

17.      }

1. 11
2. 10
3. 13
4. 14

**Answer:- B**

**Question 8**

What is the output of this program?

1.    class evaluate {

2.           public static void main(String args[])

3.           {

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

5.                  int d[] = a;

6.                  int sum = 0;

7.                  for (int j = 0; j < 3; ++j)

8.                                  sum += (a[j] \* d[j + 1]) + (a[j + 1] \* d[j]);

9.                  System.out.println(sum);

10.           }

11.     }

1. 38
2. 39
3. 40
4. 41

**Answer:- C**

**Question 9**

What is the output of this program?

1.      class array\_output {

2.              public static void main(String args[])

3.              {

4.                          int array\_variable [] = new int[10];

5.                 for (int i = 0; i < 10; ++i) {

6.                         array\_variable[i] = i/2;

7.                         array\_variable[i]++;

8.                         System.out.print(array\_variable[i] + " ");

9.                         i++;

10.                    }

11.

12.              }

13.      }

1. 0 2 4 6 8
2. 1 2 3 4 5
3. 0 1 2 3 4 5 6 7 8 9
4. 1 2 3 4 5 6 7 8 9 10

**Answer:- B**

**Question 10**

What will be the Output ?

class A

  {

          public void m1()

          { System.out.println("A"); }

  }

public class B extends A

 {

        void m1()

       { System.out.println("B"); }

   public static void main(String []args)

   {

     A a = new B();

     a.m1();

    }

 }

1. A
2. B
3. Compilation error
4. Runtime error

**Answer:-** **C**

**Question 11**

Which of the following statements are true?

i)   We cannot use abstract classes to instantiate objects directly.

ii)  The abstract methods of an abstract class must be defined in its subclass.

iii) We cannot declare abstract constructors.

iv) We may declare abstract static methods.

1. Line i only
2. Line ii only
3. Line i and ii only
4. Line i,ii and iii only

**Answer:- D**

**Question 12**

State true or false for below statements ?

i)    init() is called after start() in applet

ii)   applets are used for networking

iii)  inheritance is a part of Java Foundation Classes

iv)  final does not prevent inheritance

1. i-true, ii-true,iii-false,iv-true
2. i-false, ii-false,iii-false,iv-false
3. i-true, ii-true,iii-true,iv-true
4. i-true, ii-false,iii-false,iv-false

**Answer:- B**

**Question 13**

Which javadoc tag is used to denote a comment for a method parameter?

1. @method
2. @parameter
3. @arjument
4. @param

**Answer:- D**

**Question 14**

Which statement is true?

1. Assertions are appropriate for checking the validity of arguments in a method.

b)Conditional compilation is used to allow tested classes to run at full speed

c) The programmer can choose to execute a return statement or to throw an exception if an assertion fails

d) Assertions can be enabled or disabled on a class-by-class basis

**Answer:- D**

**Question 15**

public class Test

{

            public void foo()

           {

                   assert false; /\* Line 5 \*/

                   assert false; /\* Line 6 \*/

            }

            public void bar()

           {

                    while(true)

                    {

                              assert false; /\* Line 12 \*/

                    }

                   assert false; /\* Line 14 \*/

           }

}

What causes compilation to fail?

1. Line 5
2. Line 6
3. Line 12
4. Line 14

**Answer:- D**

**Question 16**

The concept of distributed object computing can be termed as a marriage between ............. and..................

1. C++,Java
2. C,C++
3. Networking, Object-oriented programming
4. C, Object Oriented Programming

**Answer:- C**

**Question 17**

Which of the following command lines options generates documentation for all classes and methods?

1. –protected
2. –public
3. –private
4. –verbose

**Answer:- C**

**Question 18**

class Foo

{

          class Bar{ }

}

class Test

{

          public static void main (String [] args)

          {

                  Foo f = new Foo();

                  /\* Line 10: Missing statement ? \*/

           }

}

which statement, inserted at line 10, creates an instance of Bar?

1. Foo.Bar b = new Foo.Bar();
2. Foo.Bar b = f.new Bar();
3. Bar b = new f.Bar();
4. Bar b = f.new Bar();

**Answer:- B**

**Question 19**

Converting a primitive type data into its corresponding wrapper class object instance is called :

1. boxing
2. wrapping
3. instantiation
4. autoboxing

**Answer:- D**

**Question 20**

Wrapper class is a wrapper around a ....... data type.

1. normal
2. central
3. primitive
4. concrete

**Answer:- C**

**Question 21**

When we implement the Runnable interface, we must define the method

1. run()
2. start()
3. init()
4. main()

**Answer:- A**

**Question 22**

Which method registers a thread in a thread scheduler?

1. construct();
2. start();
3. run();
4. register();

**Answer:- B**

**Question 23**

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) After thread A is notified, or after two seconds

1. After the lock on B is released, or after two seconds

c) Two seconds after thread A is notified

d) Two seconds after lock B is released

**Answer:- A**

**Question 24**

Which three guarantee that a thread will leave the running state?

1. yield()

2. wait()

3. notify()

4. notifyAll()

5. sleep(1000)

6. aLiveThread.join()

7. Thread.killThread()

1. 1,2 and 4
2. 2,5 and 6
3. 3,4 and 7
4. 4,5 and 7

**Answer:- B**

**Question 25**

Which of the following will directly stop the execution of a Thread?

1. notifyall()
2. wait()
3. exits synchronized code
4. notify

**Answer:- B**

**Question 26**

What should replace XXXX ?

class MyException extends Exception

 {

       public void method() throws XXXX

            {

                   throw new MyException();

             }

  }

1. Error
2. MyException
3. RuntimeException
4. throws clause isn’t required

**Answer:- B**

**Question 27**

What Exception is thrown when you start a thread twice ?

1. InterruptedException
2. NullPointerException
3. IOException
4. IllegalStateChangeException

**Answer:- D**

**Question 28**

What will be the output of the program?

 public class MyProgram

  {

         public static void main(String args[])

             {

                  try

                  {

                          System.out.print("Hello world ");

                  }

                 finally

                  {

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

                  }

             }

 }

a)Nothing. The program will not compile because no exceptions are specified

b) Nothing. The program will not compile because no catch clauses are specified

c)Hello World

d)Hello World Finally executing

**Answer:- D**

**Question 29**

What will happen on running the following code ?

try

 {

               int arr[]={1,2};

               arr[2]=3/0;

               System.out.println(a[0]);

  }

catch(Exception e)

 {

              System.out.println("Exception");

 }

catch(ArithmeticException e)

{

             System.out.println("Divide by Zero");

 }

1. Exception is Printed
2. Divide By Zero is printed
3. Compilation error
4. 1 is printed

**Answer:- C**

**Question 30**

Which of the following statement is false?

a)The sleep() method should be enclosed in try ......... catch block

b)The yield() method should be enclosed in try ......... catch block

c) A thread can be temporarily suspended from running by using the wait() method

d) A suspended thread using suspend() method can be revived using the resume() method

**Answer:- B**

**Question 31**

Predict Output, if the below code is run with given command ?

Command Line : java myprog good morning everyone

 public class myprog

    {

       public static void main(String argv[])

        {

              System.out.println(argv[1])

        }

    }

1. myprog
2. good
3. morning
4. everyone

**Answer:- C**

**Question 32**

The out object is an object encapsulated inside the ................. class, and represents the standard output device.

1. standard
2. local
3. globlal
4. system

**Answer:- D**

**Question 33**

Which of the following classes is used to perform basic console I/O?

1. system
2. security Manager
3. math
4. runtime

**Answer: - A**

**Question 34**

System.in.read() is being used, the program must specify the .................. clause.

1. throws java.out.IOException
2. throws java.in.IOException
3. throws java.io.IOException
4. throws java.io.InException

**Answer:- C**

**Question 35**

/\* Missing Statement ? \*/

public class foo

 {

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

                {

                               java.io.PrintWriter out = new java.io.PrintWriter();

                               new java.io.OutputStreamWriter(System.out,true);

                               out.println("Hello");

                 }

  }

What line of code should replace the missing statement to make this program compile?

1. No statement required
2. import java.io.\*;
3. include java.io.\*;
4. import java.io.PrintWriter;

**Answer:- A**

**Question 36**

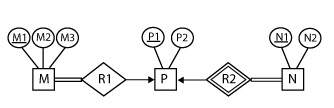
R(A, B, C, D) is a relation, which of the following does not have a lossless join, dependency preserving BCNF decomposition ?

1. A**--**>B,B🡪CD
2. A🡪B,B🡪C,C🡪D
3. AB->C,C🡪AD
4. A🡪BCD

**Answer:- C**

**Question 37**

Consider the following ER diagram:

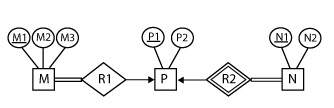
  
  
The minimum number of tables needed to represent M, N, P, R1, R2 is ?

1. 2
2. 3
3. 4
4. 5

**Answer:- B**

**Question 38**

Consider the following ER diagram

  
Which of the following is a correct attribute set for one of the tables for the correct answer to the above question ?

1. {M1,M2,M3,P1}
2. {M1,P1,N1,N2}
3. {M1,P1,N1}
4. {M1,P1}

**Answer:- A**

**Question 39**

Relation R has eight attributes ABCDEFGH. Fields of R contain only atomic values.  
 is a set of functional dependencies (FDs)  so that F is exactly the set of FDs that hold for R.  
The relation R is ?

1. in 1NF,but not in 2NF
2. in 2NF,but not in 3NF
3. in 3NF,but not in BCNF
4. in BCNF

**Answer:- A**

**Question 40**

Given relations r(w, x) and s(y, z), the result of select distinct w, x from r, s is guaranteed to be same as r, provided ?

a)r has no duplicates and s is non-empty

b)r and s have no duplicates

c)s and no duplicates and r is non-empty

d)r and s have the same number of arguments

**Answer:- A**