**LSET Preparation – Java**

**Mock Test – 3 (Apr 09, 2013)**

**Duration: 60 Minutes**

**[Total Marks: 70]**

Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section I: Java Marks: 70**

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| Q1 | public abstract interface Frobnicate { public void twiddle(String s); }  Which two of the following are legal declarations for non-nested classes and interfaces?  A. public abstract class Frob implements Frobnicate {  public abstract void twiddle(String s) { }  }  B. public abstract class Frob implements Frobnicate { }  C. public class Frob extends Frobnicate {  public void twiddle(Integer i) { }  }  D. public class Frob implements Frobnicate {  public void twiddle(Integer i) { }  }  E. public class Frob implements Frobnicate {  public void twiddle(String i) { }  public void twiddle(Integer s) { }  } | 2 |
| **Answer:** | B,E |  |
| Q2 | class Top {  public Top(String s) {  System.out.print("B");  }  }  public class Bottom2 extends Top {  public Bottom2(String s) {  System.out.print("D");  }  public static void main(String [] args) {  new Bottom2("C");  System.out.println(" ");  }  }  What will be the output of above program?     1. BD. 2. DB. 3. BDC. 4. Compilation fails. | 2 |
| Answer: | d |  |
| Q3 | Float f = new Float("12");  switch (f)  {  case 12: System.out.println("Twelve");  case 0: System.out.println("Zero");  default: System.out.println("Default");  }  What will be the output of above program??   1. Zero 2. Twelve 3. default 4. Compilation fails | 2 |
| Answer: | d |  |
| Q4 | class MyThread extends Thread  {  public static void main(String [] args)  {  MyThread t = new MyThread();  t.start();  System.out.print("one. ");  t.start();  System.out.print("two. ");  }  public void run()  {  System.out.print("Thread ");  }  }  What will be the output of the program?   1. An exception occurs at runtime 2. It prints “Thread one. Thread two.” 3. The output cannot be determined. 4. Compilation fails | 2 |
| Answer: | a |  |
| Q5 | public class EnumTest1 {  static Animals animals;  public static void main(String... args){  System.out.println(Animals.DOG.sounds + " " +  Animals.FISH.sounds);  }  }  enum Animals{  DOG("woof"), CAT ("meow"), FISH ("burble");  String sounds;    Animals(String sounds){  this.sounds = sounds;  }  }  What is the output of the above program? | 4 |
| **Answer:** | Woof burble |  |
| Q6 | public class EnumTest2 {  public static void main(String... args) {  System.out.println(AnimalFamily.DOG.sounds + " "  + AnimalFamily.FISH.sounds);  }  }  enum AnimalFamily {  String sounds;//Line 9  DOG("woof"), CAT("meow"), FISH("burble");//Line 10  AnimalFamily(String sounds) {  this.sounds = sounds;  }  }  What is the output of above program?   1. woof burble 2. Multiple Compilation errors. 3. Compilation fails due to an error on line 9 4. Compilation fails due to an error on line 10 | 4 |
| **Answer:** | c |  |
| Q7 | public class VarArgsTesting {    public static void main(String[] args){  VarArgsTesting obj = new VarArgsTesting();  obj.method(4,5,6);  }    void method(int ...i){  System.*out*.println("Inside varargs version");  }    void method(int i, int y, int z){  System.*out*.println("Inside int version");  }  void method(Integer ...i){  System.out.println("Inside Integer version");  }  }    What is the output of the above program? | 4 |
| **Answer:** | Inside int version |  |
| Q8 | public class VarArgsTesting2 {    public static void main(String[] args){  VarArgsTesting obj = new VarArgsTesting();  int[] intarray = {4,5,6};  obj.method(intarray);  }    void method(int ...i){  System.out.println("Inside varargs version");  }  void method(Integer[] array){  System.out.println("Inside array version");  }  }  What is the output of the above program?   1. Inside varargs version 2. Inside array version 3. Multiple Compilation errors 4. Compilation fails. 5. Runtime exception is thrown | 2 |
| **Answer:** | a |  |
| Q9 | Consider the method below:  public String mystery(String s)  {  String s1 = s.substring(0,1);  String s2 = s.substring(1, s.length() - 1);  String s3 = s.substring(s.length() - 1);  if (s.length() <= 3)  return s3 + s2 + s1;  else  return s1 + mystery(s2) + s3;  }  What will be output of following statement:  System.out.println(mystery("DELIVER")); | 4 |
| **Answer:** | DEVILER |  |
| Q10 | class Parent  {  public int i = 0;  public Parent(String text)  {  i = 1;  }  }  class Child extends Parent  {  public Child(String text)  {  super(text);  i = 2;  }  public static void main(String args[])  {  Child child = new Child("Hello");  Parent parent = (Parent)child;  System.*out*.println(parent.i);  }  }  What will be the output of above program? | 4 |
| **Answer:** | 2 |  |
| Q11 | class Parent {  public int i = 0;  public Parent(String text) {  i = 1;  }  }  class Child extends Parent {  public int i = 0;  public Child(String text) {  super(text);  i = 2;  }  public static void main(String args[]) {  Child child = new Child("Hello");  Parent parent = (Parent) child;  System.out.println(parent.i);  }  }  What is the output of the above program? | 4 |
| **Answer:** | 1 |  |
| Q12 | public class Outer {  private String x = "Outer variable";  void doStuff() {  String z = "local variable";  class Inner {  public void seeOuter() {  System.out.println("Outer x is " + x);  System.out.println("Local variable z is " + z);  }  }  }  }  What is the output of the above program?   1. Outer x is Outer Variable. 2. Compilation error. 3. Local Variable Z is local variable. 4. Outer x is Outer Variable Local Variable Z is local variable | 2 |
| **Answer:** | b |  |
| Q13 | Which are true about a static nested class? (Choose all that apply.)   1. You must have a reference to an instance of the enclosing class in order to instantiate it 2. It does not have access to non-static members of the enclosing class 3. Its variables and methods must be static 4. If the outer class is named MyOuter, and the nested class is named MyInner, it can be instantiated using new MyOuter.MyInner(); 5. It must extend the enclosing class | 2 |
| **Answer:** | b, d |  |
| Q14 | class Boo {  Boo(String s) {  }  Boo() {  }  }  class Bar extends Boo {  Bar() {  }  Bar(String s) {  super(s);  }  void zoo() {  // insert code here  }  }  Which create an anonymous inner class from within class Bar? (Choose all that apply.)   1. Boo f = new Boo(24) { }; 2. Boo f = new Bar() { }; 3. Boo f = new Boo() {String s; }; 4. Bar f = new Boo(String s) { }; 5. Boo f = new Boo.Bar(String s) { }; | 2 |
| **Answer:** | b, c |  |
| Q15 | import java.util.Stack;  public class StackTesting {  public static void main(String ...args){  Stack<String> stackobj = new Stack<String>();  stackobj.add("One");  stackobj.add("Two");  stackobj.add("Three");  stackobj.pop();  System.out.println("Stack Size = "+(stackobj.size()));  }  }  What will be output of above program? | 4 |
| **Answer:** | 2 |  |
| Q16 | public class GenericTest1 {  public static void main(String...args){  List<? super Rat> ratlist = new ArrayList<Rat>();  ratlist.add(new Rat());  ratlist.add(new Rat());  ratlist.add(new Rat());  doNothing(ratlist);  }    static void doNothing(List<? super Rat> animal){  animal.add(new Rat());  System.out.println(animal.size());  }  }  class Animalss{    }  class Rat extends Animalss{    }  class Cat extends Animalss{    }  What will be output of above program?   1. Compilation fails 2. 3 3. 4 4. Runtime Exception | 4 |
| **Answer:** | c |  |
| Q17 | class MyThread extends Thread {  MyThread() {  System.*out*.print(" MyThread");  }  public void run() {  System.*out*.print(" bar");  }  public void run(String s) {  System.*out*.print(" baz");  }  }  public class TestThreads {  public static void main(String[] args) {  Thread t = new MyThread() {  public void run() {  System.*out*.print(" foo");  }  };  t.start();  }  }  What will be output of above program? | 4 |
| **Answer:** | MyThread foo |  |
| Q18 | import java.util.ArrayList;  import java.util.List;  public class GenericTest2 {  public static void main(String ...strings){  List<Lion> lionlist = new ArrayList<Lion>();  lionlist.add(new Lion());  lionlist.add(new Lion());  lionlist.add(new Lion());  doNothing(lionlist);  }    static String foo() {  return "foo";  }    static void doNothing(List<? extends WildAnimal> object){  object.add(null);  System.out.println(object.size());  }  }  class WildAnimal{    }  class Lion extends WildAnimal{    }  class Tiger extends WildAnimal{    }  What will be output of above program?   1. Compilation fails 2. 3 3. 4 4. Runtime Exception | 4 |
| **Answer:** | 3 |  |
| Q19 | class Bar {  }  class Test {  Bar doBar() {  Bar b = new Bar(); /\* Line 6 \*/  return b; /\* Line 7 \*/  }  public static void main(String args[]) {  Test t = new Test(); /\* Line 11 \*/  Bar newBar = t.doBar(); /\* Line 12 \*/  System.*out*.println("newBar");  newBar = new Bar(); /\* Line 14 \*/  System.*out*.println("finishing"); /\* Line 15 \*/  }  }  At what point is the Bar object, created on line 6, eligible for garbage collection?   * 1. After line 12   2. After line 14   3. After line 7, when doBar() completes   4. After line 15, when main() completes | 2 |
| **Answer:** | b |  |
| Q20 | What is the output for the below code?  public class Switch2 {  final static short *x* = 2;  public static int *y* = 0;  public static void main(String[] args) {  for (int z = 0; z < 3; z++) {  switch (z) {  case *y*: /\* Line 11 \*/  System.*out*.print("0 ");  case *x* - 1: /\* Line 13 \*/  System.*out*.print("1 ");  case *x*:  System.*out*.print("2 ");  }  }  }  }   1. 0 1 2 2. 0 1 2 1 2 2 3. Compilation fails at line 11 4. Compilation fails at line 13 | 2 |
| **Answer:** | c |  |
| Q21 | public class OverloadTest {  public static void main(String [] args){  OverloadTest ot = new OverloadTest();  ot.method(null);  }    void method(Integer integer){  System.out.println("Inside Integer version");  }    void method(Object o){  System.out.println("Inside object version");  }    void method(int i){  System.out.println("value of i ="+i);  }  } | 2 |
| **Answer:** | Inside Integer version |  |
| Q22 | List cities = new ArrayList();  cities.add("Atlanta");  cities.add("Boston");  for (int i = 1; i < cities.size(); i++)  cities.add(i, "+");  System.out.println(cities);  What will be output of above program?   1. [Atlanta, Boston] 2. [Atlanta, +, Boston] 3. [Atlanta, Boston, +] 4. [Atlanta, +, Boston, +] 5. No output because the program goes into an infinite loop | 2 |
| **Answer:** | e |  |
| Q23 | Consider the following method:  public int goFigure(int x) {      if (x < 100)           x = goFigure(x + 10);      return (x - 1); }  What does goFigure(60) return?   1. 59 2. 69 3. 95 4. 99 5. 109 | 2 |
| **Answer:** | c |  |
| Q24 | class A  {  final private int GetResult(int a, int b) { return 0; }  }  class B extends A  {  public int GetResult(int a, int b) {return 1; }  }  public class Test  {  public static void main(String args[])  {  B b = new B();  System.out.println("x = " + b.GetResult(0, 1));  }  }  What will be output of above program?   1. x = 0 2. x = 1 3. compilation fails 4. An exception is thrown at runtime | 2 |
| **Answer:** | b |  |
| Q25 | class Exc0 extends Exception {  }  class Exc1 extends Exc0 {  } /\* Line 2 \*/  public class Test {  public static void main(String args[]) {  try {  throw new Exc1(); /\* Line 9 \*/  } catch (Exc0 e0) /\* Line 11 \*/  {  System.*out*.println("Ex0 caught");  } catch (Exception e) {  System.*out*.println("exception caught");  }  }  }  What will be output of above program? | 2 |
| **Answer:** | Ex0 caught |  |

**Section II: Software Engineering Marks: 30**

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| Q1 | The Work Breakdown Structure (WBS):  a. Is a list of the main phases of the project  b. Is only needed if a project planning software is used  c. Should cover task on an hour by hour basis  d. A hierarchical description of all the tasks to be performed | 2 |
| **Answer:** | **D** |  |
| Q2 | Elements of software quality are  A) people, performance, product  B) people, process, payoff, project  C) people, process, technology  D) people, process, product | 2 |
| **Answer:** | **C** |  |
| Q3 | choosing a developing language of a software is  A) product requirement  B) process requirement  c) A & B  D) None of the above | 2 |
| **Answer:** | **B** |  |
| Q4 | Which form of software development model is most suited to a system where all  the requirements are known at the start of a project and remain stable  Throughout the project.  A) Waterfall model  B) Incremental model  C) Evolutionary model  D) Spiral model | 2 |
| **Answer:** | **A** |  |
| Q5 | The most common factors, which contribute to the risk of a project, are:  a. Cost, schedule and scope  b. Resources and liability  c. A and B  d. Ownership and contractors | 2 |
| **Answer:** | **C** |  |
| Q6 | Risk Management will only be successful if:  a. A thorough scope of work document has been prepared  b. The project success criteria are incorporated into specific phases  c. A risk management plan is created and monitored  d. Risks identified have been quantified | 2 |
| **Answer:** | **C** |  |
| Q7 | How Risk severity is calculated? ( write the equation) | 2 |
| **Answer:** | **Risk severity = occurance probability \* impact \* occurence;** |  |
| Q8 | The linear sequential model of software development is  A) A reasonable approach when requirements are well defined.  B) A good approach when a working program is required quickly.  C) The best approach to use for projects with large development teams.  D) An old fashioned model that cannot be used in a modern context. | 2 |
| **Answer:** | **A** |  |
| Q9 | The prototyping model of software development is  A) A reasonable approach when requirements are well defined.  B) A useful approach when a customer cannot define requirements clearly.  C) The best approach to use for projects with large development teams.  D) A risky model that rarely produces a meaningful product. | 2 |
| **Answer:** | **B** |  |
| Q10 | The spiral model of software development  A) Ends with the delivery of the software product  B) Is more chaotic than the incremental model  C) Includes project risks evaluation during each iteration  D) All of the above | 2 |
| **Answer:** | **C** |  |
| Q11 | The result of the requirements engineering elaboration task is an analysis model  that defines which of the following problem domain(s)?  A) information  B) functional  C) behavioral  D) all of the above | 2 |
| **Answer:** | **D** |  |
| Q12 | Infinite loop is a  A) Data defect  B) control defect  C) interface defect  D) None of the above | 2 |
| **Answer:** | **B** |  |
| Q13 | Operating cost is a functional requirement.   1. True 2. False | 2 |
| **Answer:** | **B** |  |
| Q14 | The project management system involves  A) project planning  B) Task management & monitoring  C) risk management  D) All of the above | 2 |
| **Answer:** | **D** |  |
| Q15 | The project schedule:  A) Is used to calculate how long the project will take  B) Can only be done using a software program  C)Contains the lists of tasks, their duration and resources allocated  D) Is the same as the Gantt chart | 2 |
| **Answer:** | **C** |  |