Midterm Model Answer

Question one: (9 Marks)

a) **What is the output of the following program? (2 mark)**

```
The value of x is:true
The value of m is30
```

b) **What is the output of the following program? (2 mark)**

```
/MyfinalClass.java:7: error: cannot assign a value to final variable x
        myobj.x=30;
              ^
1 error
```

c) **What is the output of the following program? (3 mark)**

```
Welcome to Our Operator Program
 operator +
bye bye
```

d) **What is the output of the following program? (2 mark)**

```
the maximum speed is 140
```

Question two (3 Marks) TRUE or FALSE:

a) False
b) TRue
c) True
d)true
e) true
f)true

Question three: (5 Marks):

a) Insert the missing parts to handle the error in the code below:

```
  try {
     int[] myNumbers = {1, 2, 3};
           System.out.println(myNumbers[10]);
       }   Catch (Exception e) {

       System.out.println("Something went wrong.");
       }
```

b) Insert the missing parts to create a two-dimensional array:

```
int[][] myNumbers = { {1, 2, 3, 4}, {5, 6, 7} };
```

c) Fill in the blanks:

```
Subclass constructors can call superclass constructors via the keyword  super
```

d) Follow the comments to insert the missing parts of the code below:

```
// Create a checkAge() method with an integer variable called age
static void  checkAge ( int age ) {
```

```
  // If age is less than 18, print "Access denied"
      if    ( age < 18 ) {

          System.out.println("Access denied");
// If age is greater than 18, print "Access granted"
  }    else {

        System.out.println("Access granted");
  }

}
public static void main(String[] args) {
  // Call the checkAge method and pass along an age of 20

   checkAge(20 );

   }
```

Question four: (5 Marks) COMPILER ERRORS:

The following code includes ten compiler errors. Circle the line number to the left of each line that contains a compiler error and give a brief reason for the compiler error in the column to the right. There is a maximum of one error on any given line.

#	Code	Brief Explain
1	**import java.util.Scanner;**	
2	**/* This program indicates if a triangle is a**	
3	**valid triangle or not. A triangle is a**	
4	**valid triangle, if the sum of any of it's**	
5	**two sides is greater than the third one.**	
6	**/***	**is not in its right place**
7	**abstract class CTraingle{**	
8	**abstract void read_numbers();**	

9	boolean traingle (double a, double b,double z);	Cannot be private function
10	}	
11	class CITraingle implements CTraingle{	Interface not class
12	private double x1,y2;	
13	public double y1,z1;	
14	public void read_numbers(double a, double b,double z) {	abstract method signature is not matching the above declaration
15	Scanner keyboard=new Scanner(System.in);	
16	System.out.println("Enter the first number:");	
17	x1= keyboard.nextInt();	double not integer
18	System.out.println("Enter the first number:");	
19	y1=keyboard.nextDouble();	
20	System.out.println("Enter the first number:");	
21	z1=keyboard.nextDouble();	
22	}	
23	public boolean traingle(double x,double y, double z){	
24	if(x+y>z && ((x+z)>y) && ((z+y)>x))	the parantheses of the if first comparsion
25	return true;	
26	else	
27	return false;	
28	}	
29	}	
30	public class CITraingletest{	
31	public static void main(String args[]) {	
32	// boolean true_or_false;	
33	CITraingle it_obj= new CITraingle;	() missing constructor parentheses

34	itobj.read_numbers();	Missing passing arguments
35	double x=it_obj.x1;	Private variable accessing
36	double y=it_obj.y1;	
37	double z=it_obj.z1;	
38	if(it_obj.traingle(x,y))	Method triangle missing parmeter to be passed
39	System.out.println("this is not a vaild");	
40	else if(it_obj.traingle(x,y,z))	
41	System.out.println("this is valid traingle");	
42	else	
43	System.out.println("this is not a valid traingle");	
44	}	
45	}	