CompSci 101 Test
Second Semester 2005

ANSWER SHEET

Surname .....

Forenames .....

Student ID .....

Login name(UPI) .....

Lab Time …….....

Examiner to complete:

Question	Mark
1 – 15	**(/45)**
16	**(/5)**
17	**(/5)**
18	**(/5)**
19	**(/10)**
20	**(/10)**
21	**(/10)**
22	**(/10)**
Total	**(/100)**

ID.....

SECTION A: MULTIPLE CHOICE QUESTIONS

Each question in this section is worth 3 marks. **Circle** the letter corresponding to your choice. There is only one correct answer for each question.

1.	**(a)**	(b)	(c)	(d)	(e)
2.	(a)	(b)	(c)	**(d)**	(e)
3.	(a)	(b)	(c)	**(d)**	(e)
4.	**(a)**	(b)	(c)	(d)	(e)
5.	(a)	**(b)**	(c)	(d)	(e)
6.	(a)	(b)	(c)	(d)	**(e)**
7.	(a)	**(b)**	(c)	(d)	(e)
8.	(a)	(b)	**(c)**	(d)	(e)
9.	(a)	**(b)**	(c)	(d)	(e)
10.	(a)	(b)	(c)	**(d)**	(e)
11.	**(a)**	(b)	(c)	(d)	(e)
12.	(a)	(b)	**(c)**	(d)	(e)
13.	(a)	(b)	(c)	(d)	**(e)**
14.	(a)	(b)	(c)	**(d)**	(e)
15.	(a)	(b)	**(c)**	(d)	(e)

ID.....

SECTION B

Write your answers in the spaces provided.

16. Write down a list of all of the possible values that may be stored in the variable `random` when the code segment is executed.

7, 12, 17, 22, 27

(5 marks)

17. Show the output below.

a
bc
de

(5 marks)

18. Show the output below.

6
mp
2
TEST
-1

(5 marks)

19. Show the output when the `start()` method is executed.

```
double: 3
plus: 3 0
plus: 3 3
product: 6
```

(10 marks)

20. Define the `Animal` class below.

```
public class Animal {

       private String type;
       private int numLegs;

       public Animal(String type, int numLegs){
            this.type = type;
            this.numLegs = numLegs;
       }

       public String getType() {
            return type;
       }

       public boolean canWalk() {
            return numLegs > 1;
       }
  }
```

(10 marks)

21. Circle the 5 syntax errors in the code below – only circle errors which would prevent the code from compiling. Beneath each error you circle, clearly provide a correction for the error.

```
public class CalculateArea

     public start() {

          System.out.println("\"Area Calculator"\");

          final double HEIGHT = 5.0;

          double WIDTH = 4.5;

          double area - WIDTH * HEIGHT;

          System.out.println("The area is: " , area);

     }

}
```

(10 marks)

22. Complete the `HalvingProgram` class in the space below.

```
public class HalvingProgram {

  public void start() {

        System.out.print("Enter number: ");
        int i = Integer.parseInt(Keyboard.readInput());

        System.out.println("Halving:");
        System.out.println(i);

        while (i % 2 == 0) {
             i = i / 2;
             System.out.println(i);
        }

  }
}
```

(10 marks)

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ROUGH WORKING
(Will not be marked)