### CS1020 Data Structures and Algorithms I

#### **ANSWER SHEETS**

#### **INSTRUCTIONS TO CANDIDATES**

- 1. This document consists of **EIGHT (8)** printed pages.
- 2. Fill in your Matriculation Number <u>clearly</u> below and at the top of pages 3 and 5.
- 3. The last two blank pages (pages 7 and 8) may be used if you need more space to write your answers.

MATRICULATION NO.:									
(Write your Matriculation Number legibly with a pen.)									

For examiners' use only			
Question	Max	Marks	
Q1-6	6		
Q7	2		
Q8	6		
Q9	6		
Q10	7		
Q11	13		
Total	40		

CS1020

Qs			[6 marks]
Q1.	Q2.	Q3.	
Q4.	Q5.	Q6.	
			[2 marks]
a.			
b.			
Output of TestS:			[6 marks]
	Q4ab.	Q1.	Q1.

Matriculation no.:		
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CS1020 [6 marks]

**Q9.** Game.java

```
public class Game {
  private static final int LIMIT = 1000;
  public static void main(String[] args) {
     Die die = new Die();
```

Q10.

(a) Modify the constructor.	[5 marks]
<pre>public MyRect(Point v1, Point v2) {</pre>	
3	
}	
(b) A default constructor to create a rectangle with vertices at (0,0) and (1,1).	[1 mark]
<pre>public MyRect() {</pre>	
}	
(c) Reason to change the two mutators into private methods.	[1 mark]

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Q11.

(a)

[6 marks]

```
public static MyRect
              boundingRect(
                                                        )
{
```

**Q11.** (b) [7 marks]

```
public static double
          minDistBtwPair (
                                                        )
{
```

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Use it ONLY if you need extra space for your answer, in which case please indicate the

<u>question number clearly</u> .	

## This page is intentionally left blank. Do **NOT** use it for your rough work.

Use it ONLY if you need extra space for your answer, in which case please indicate the **question number clearly**.

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