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 clearly 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.)

<table>
<thead>
<tr>
<th>Question</th>
<th>Max</th>
<th>Marks</th>
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<tbody>
<tr>
<td>Q1-6</td>
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<td>Q7</td>
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<td>Q9</td>
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<td>Q10</td>
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<td>Q11</td>
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For examiners’ use only
MCQs [6 marks]

Q1.  
Q2.  
Q3.  
Q4.  
Q5.  
Q6.  

Q7. [2 marks]

a.  
b.  

Q8. Output of TestS: [6 marks]
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]

```java
public MyRect(Point v1, Point v2) {
}
```

(b) A default constructor to create a rectangle with vertices at (0,0) and (1,1). [1 mark]

```java
public MyRect() {
}
```

(c) Reason to change the two mutators into private methods. [1 mark]
Q11.  
(a) [6 marks]

```java
public static MyRect
    boundingRect()
{
}
```
Q11.  
(b) 
[7 marks]

```java
public static double
    minDistBtwPair ( )
{
}
```
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.