## 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.

(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 | $\mathbf{4 0}$ |  |

MCQs

Q1.

Q2.


Q3.


Q4.


Q5.


Q6.


Q7.
a.
b.

Q8. Output of TestS:
[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.

## public MyRect(Point v1, Point v2) \{

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

## public MyRect() \{

\}
(c) Reason to change the two mutators into private methods.
$\square$

Q11.
(a)

## public static MyRect boundingRect( <br> \{

Q11.
(b)
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.

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.

