**TRW222**

**TEST 3 Asymptotic Analysis**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student No\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1 Gee die definisie van die asimptotiese bogrens O(g(n)) (5) | 1. *Give the definition of the asymptotic upper bound O(g(n)) (5)* |
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| 1. Ontleed die volgende programdeel met Groot O (O(n)) (10) | Analyse the following program segment with Big Oh (O(n)) (10) |
| public class Question1.3  {  public static int numbers (int n)   1. { 2. int prod = 1; 3. for (int i=1; i<n; i++ ) 4. { 5. for ( int j=0; j<i; ++j) 6. prod \*=j; 7. } 8. return prod; 9. } 10. } | |
| 5 | *8b* |
| *6a* | *8c* |
| *6b* | *9* |
| 6c | 11 |
| 8a | TOTAAL: |

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| 4. Gee die reël van die asimptotiese ontleding van ŉ JAVA FOR-STRUKTUUR (10) | 1. *Dive the definition the asymptotic analysis of a JAVA FOR-STRUCTURE (10)* |
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