**MATHEMATICS - GRADE 11 2023**

|  |  |  |
| --- | --- | --- |
| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (14 November 2022 – 31 March 2023)** |
| **Statistics** | Graphical representations | **Task 1**Control Test A: Stats & Equations. 30 Jan – 3 Feb Control Test B:Alg & Finance. 6 – 10 Mar**Task 2**Investigation: Number patterns. 13 – 17 Feb  |
| Ogive curves |
| Standard deviation |
| **Algebra** | Solve quadratic equations |
| Solve quadratic inequalities |
| Algebraic expressions: completing the square |
| Solve equations in 2 unknowns, one quadratic |
| Nature of Roots |
| **Number patterns** | Linear and quadratic number patterns |
| **Finance** | Simple and compound decay |
| Rate and periods in compound growth and decay |
| **Analytical Geometry** | Parallel, perpendicular, inclination |
| Equation of a straight line |
| **PHASE 2 (12 April 2023 – 23 June 2023)** |
| **Functions** | Investigate characteristics of the functions: and  | **Task 3** Assignment: Analytical Geom10 – 14 April**Task 4**June Exams5 – 23 June**Task 5**Control Test A: Functions. 24 – 28 AprControl Test B: Trig. 15 – 19 May |
| Average gradient between points on a curve |
| **Trigonometry** | CAST, Reductions |
| Identities quotient and squares formulae |
| Trigonometric equations and general solution |
| **PHASE 3 (18 July 2023 – 10 November 2023)** |
| **Trig functions** | Functions : y = sin k(x + p) ; y = cos k(x + p) and  y = tan k(x + p) | **Task 6**Control Test A:Trig functions. 7 – 11 AugControl Test B:Surds, Exp and Exp func 14 – 18 Aug**Task 7**Control Test C:Chord theorems & angles in circles. 4 – 8 SeptControl Test D:Cyclic quads & tangents11 – 15 Sept**Task 8**October Exam23 Oct – 10 Nov |
| **Number and Exponent** | Surds |
| Rational exponents |
| Characteristics of the function  |
| **Euclidean Geometry** | Circle theorems |
| Solving riders  |
| **Probability** | Revision of Grade 10 rules |
| Venn diagrams and Tree diagrams |
| **Trigonometry** |  Sine, cosine and area rules  |
| Solution of right-angled and oblique triangles |