



Assessment & Examinations Unit
Assessment Material Development Dept.

Mathematics
Admission Tests

Content

Core Skills and test specs

Nile International Education System

2017 Edition

Grade 10 topics:

Grade	Timing	Total mark	STRAND			
			Numbers	algebra	Geometry and measure	Data handling
Grade 10	written test two papers: Paper 1 (20 minutes) Paper 2 (20 minutes)	40 marks Paper 1 calculator NOT allowed Paper 2 calculator allowed	<ol style="list-style-type: none"> 1. Powers and roots 2. index laws 3. Prime factors 4. HCF, LCM 5. Add, subtract, multiply, divide integers 6. Order of operations; 7. Decimal places 8. Converting between fractions and decimals 9. ordering fractions 10. Calculating ratios 11. direct proportion and Inverse proportion 12. Percentage of a quantity 13. The set of real numbers; union and intersection; Venn diagrams 	<ol style="list-style-type: none"> 1. Collecting like terms 2. substitution Algebraic index laws Algebraic fractions 3. Construct expressions 4. Factorizing by removing common factors 5. Solving linear equations 6. simultaneous linear equations 7. solve Linear inequalities in one variable 8. Equation of straight line 9. Deriving formulae; substituting in formulae 10. Identify the domain and the range of an equation 11. Graphical and algebraic solutions of simple quadratic equations 	<ol style="list-style-type: none"> 1. Alternate and corresponding angles 2. Understand congruency 3. Time and average speed 4. Drawing lines, triangles and angles 5. Mid-point of line segment 6. Areas, volumes and surface areas of cubes and cuboids 7. Pythagoras' theorem in 2D 8. Sine , cosine and tangent ratios 	<ol style="list-style-type: none"> 1. Sampling 2. Secondary and primary sources of data 3. Questionnaire 4. Collecting data, tally charts, frequency tables Bar charts, pie charts, pictograms 5. Probability