

UCE MTCS 456/1 Format.

Section A will comprise of two items and section B comprises of Part I and Part II each having two questions and a learner answers one question from part

Item	Area of construct	Topics covered	
SECTION A: compulsory			
Item one	Numbers	✓ Number bases	
		✓ Working with integers	
		✓ Fractions, percentages and decimals	
		✓ Numerical concept 1 and 2	
		✓ Ratios and proportions	
Item Two	Patterns and algebra	✓ Sequences and patterns	
		✓ Equations of line and curves	
		✓ Algebra 1 and 2	
		✓ Mapping and relations	
		✓ Inequalities and regions	
		✓ Equation of a straight line	
		✓ Rectangular Cartesian plane	
		✓ Simultaneous equations	
		✓ Linear programming	
		✓ Loci	
SECTION B			
PART I (choose one question)			
Item 3 and 4	DATA AND PROBABILITY	✓ Data collection and presentation	
		✓ Graphs	
		✓ Set theory	
		✓ Data collection and display	
		✓ Matrices	
		✓ Probability	
PART II (choose one question)			
Items 5 and 6	GEOMETRY AND MEASURES	✓ Geometrical construction	
		✓ Bearings	
		✓ General and angle properties of geometric figures	
		✓ Reflection	
		✓ Business arithmetic	
		✓ Time and tables	
		✓ Similarities and enlargement	
		✓ Circle	
		✓ Rotation	

		✓ Length and area properties of two dimensional geometrical figures	
		✓ Nets, areas and volumes of solids	
		✓ Trigonometry 1 and 2	
		✓ Vectors	
		✓ Business mathematics	
		✓ Matrix transformation	
		✓ Circle properties	
		✓ Lines and planes in three dimensions	