MATHEMATICS PAPER 1
TIME: 2 HOURS

Name: _____ Class:

Instructions to Candidates

1. Answer **all** the questions.
2. Mathematical tables may be used where necessary.
3. Calculators may be used unless stated otherwise.

Section 1: Real Numbers (10 Marks)

1. Achieng is sorting a set of cards numbered 20 to 30. List all the prime numbers she will find in this set. (1 mark)

2. Using mathematical tables, find the reciprocal of 0.04562. (2 marks)

3. A farmer in Mwea wants to distribute 5,000 kg of rice into smaller bags. If each bag holds 12.5 kg, use the reciprocal of 12.5 to calculate the total number of bags needed. (3 marks)

4. Classify the following numbers as either rational or irrational: (4 marks)

$$\sqrt{2},\quad 0.75,\quad \pi,\quad \sqrt{16}$$

Section 2: Indices and Logarithms (15 Marks)