

The Ramanujan Oxbridge Challenge

Question Paper 1

This document contains official questions for The Ramanujan Oxbridge Challenge. All candidates must read each question carefully and follow the instructions provided. Use the allocated time wisely and ensure that all answers are written clearly and concisely.

Section A – Mathematics

1. Evaluate the limit as x approaches 0 for $(\sin x) / x$.
2. Solve the quadratic equation $x^2 - 5x + 6 = 0$.
3. If a triangle has sides of length 3 cm, 4 cm, and 5 cm, calculate its area.



Section B – Logical Reasoning

1. If all roses are flowers and some flowers fade quickly, can we conclude that some roses fade quickly?
2. Arrange the following words in alphabetical order: Mango, Apple, Banana, Cherry, Grape.

