### MAT 2003 Relevance Checker

- Red: Question not relevant for current syllabus.
- Orange: Question not entirely relevant for current syllabus but worth attempting. See comments.
- Black: Question relevant for current syllabus.

## 1. Multiple Choice

#### (A). Solutions of Quadratic

This question is relevant for the current syllabus.

#### (B). Approximating Logarithms

This question is relevant for the current syllabus.

#### (C). Trigonometric Equations

This question is relevant for the current syllabus, although it would use degrees rather than radians on a modern paper.

### (D). Definite Integral

This question uses advanced integration results and is not relevant for the current sylabus.

#### (E). Fractional Inequality

This question is relevant for the current syllabus.

#### (F). First to Throw Six

This question is relevant for the current syllabus.

### (G). Differential Equation

This question involves either solving differential equations or using the chain rule to differentiate. In either case, it is not relevant for the modern syllabus.

### (H). Dividing the Plane

This question is relevant for the current syllabus.

#### (I). Buying Biscuits

This question is relevant for the current syllabus.

### (J). Identifying the True Statement

This question is relevant for the current syllabus except that it involves the modulus function. If it were asked on a modern paper, they would need to give you the definition of |x| rather than treating it as assumed knowledge. Specifically, |x| is x if  $x \ge 0$  and -x otherwise.

## 2. Fun with Factorials

The entirety of this question is relevant for the current syllabus.

## 3. Cartesian Geometry

The entirety of this question is relevant for the current syllabus.

# 4. Family of Quadratics

The entirety of this question is relevant for the current syllabus.

# 5. Light Bulbs

The entirety of this question is relevant for the current syllabus.