

MAT3

## MATHEMATICAL TRIPOS Part III

Thursday 5 June 2025 9:00 am to 12:00 pm

### **PAPER 102**

#### LIE ALGEBRAS AND THEIR REPRESENTATIONS

# Before you begin please read these instructions carefully

Candidates have THREE HOURS to complete the written examination.

Attempt no more than **FOUR** questions.

There are **FIVE** questions in total.

The questions carry equal weight.

### STATIONERY REQUIREMENTS

SPECIAL REQUIREMENTS Triangular graph paper (3 sheets)

Treasury tag Script paper

Cover sheet

Rough paper

You may not start to read the questions printed on the subsequent pages until instructed to do so by the Invigilator.