

MAT3

**MATHEMATICAL TRIPOS**      **Part III**

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Friday, 9 June, 2023    1:30 pm to 3:30 pm

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**PAPER 319**

**UNBOUNDED OPERATORS AND SEMIGROUPS**

**Before you begin please read these instructions carefully**

Candidates have **TWO HOURS** to complete the written examination.

Attempt **ALL** parts of the question.

There is **ONE** question in total.

In doing a given part of the question you may use assertions in preceding parts even if you did not complete that part.

**STATIONERY REQUIREMENTS**

Cover sheet  
Treasury tag  
Script paper  
Rough paper

**SPECIAL REQUIREMENTS**

None

<p><b>You may not start to read the questions printed on the subsequent pages until instructed to do so by the Invigilator.</b></p>
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