

SECOND PUBLIC EXAMINATION

Honour School of Mathematical Sciences: Paper O1

HISTORY OF MATHEMATICS

Reading Course Hilary Term 2023:

Isaac Newton's *Arithmetica universalis*

Candidates should write an essay of 3000 words using the following as a guide.

Up to 10% variation in length is permissible.

The bibliography is not included in the word count.

Essay to be submitted by 12 noon on Monday 20th March 2023 (HT week 10)

Isaac Newton's *Arithmetica universalis*

Discuss the context, content, and significance of Newton's *Arithmetica universalis*. It is *suggested* that your essay focus on three or four of the following points, but note that this list is offered for guidance only and should not inhibit your own ideas.

- (1) The motivation for Newton's work and the context within which it appeared.
- (2) The terminology and concepts employed — in particular, Newton's conception of algebra.
- (3) The technical content of the work.
- (4) The manner in which the work was published and received.
- (5) The influence of the *Arithmetica universalis* in Britain and abroad.