

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualifications:–

B.Sc. *M.Sci.*

Mathematics C382: History Of Mathematics

COURSE CODE : MATHC382

UNIT VALUE : 0.50

DATE : 26–MAY–05

TIME : 14.30

TIME ALLOWED : 2 Hours

*All questions may be attempted but only marks obtained on the best **four** solutions will count. The use of an electronic calculator is **not** permitted in this examination.*

1. Compare and contrast the mathematical contributions of Euclid and Archimedes. Does any of their work have a modern importance?

2. How was the mathematics of the Mediterranean world of Antiquity transmitted to the early modern world? What was gained and what lost in the process?

3. Describe the seventeenth century development of the calculus. In what sense (if any) could it be regarded as inevitable?

4. At the end of the Nineteenth Century, the non-Euclidean geometries were declared to be the most important mathematical development of that century. Why could this view be held then? Could it still be justified?

5. Write an essay on ONE of the following topics:-
 - (a) Arithmetic in Antiquity;
 - (b) The theory of equations before 1850;
 - (c) Solving problems versus creating theories.