UNIVERSITY OF LONDON

MA PHILOSOPHY OLD REGULATIONS
for Internal Students

PHILOSOPHY OF MATHEMATICS

Tuesday, 12 September 2000: 10.00 - 1.00

Answer THREE questions.

1. What role, if any, does abstraction have in our knowledge of mathematical objects?

2. 'Points without magnitude and lines without breadth are inconceivable; so geometry is not strictly true.' Discuss.

3. Are there insuperable problems for the view that mathematics is part of logic?

4. Is fictionalism a tenable position in the philosophy of mathematics?

5. Can the practice of non-finitary mathematics be justified from a finitary point of view?

6. What significance does Russell's paradox have for philosophy of mathematics?

7. Is there a good account of our knowledge of sets?

8. Can we dispense with mathematical objects in favour of mathematical structures?

9. 'The number of Fs is equal to the number of Gs iff the Fs can be correlated one-one with the Gs.' Discuss.

10. Is it legitimate to use the Law of Excluded Middle in mathematical reasoning?

11. What, if anything, is wrong with the view that mathematics is merely a game with signs?

12. To what extent is mathematical knowledge empirical?

END OF PAPER