PHYSICS AND PHILOSOPHY

Philosophy

There are two philosophy papers in the First Public Examination for Physics and Philosophy. One is devoted exclusively to **logic**, and the other contains two sections that you will have to answer questions from: (i) **general philosophy**, (ii) **Leibniz-Clarke**. Philosophy work will start off in the first term (Michaelmas) with logic classes and there is some preparatory logic work to complete before you arrive: a straightforward set of exercises is specified below.

Logic

The notation, terminology, and proof system used come from the textbook *The Logic Manual*, written by Volker Halbach, published by Oxford University Press. You should aim to get as far as you can reading this before you arrive: don't expect to find it easy, and make a note of things that you find puzzling. **The preparatory exercises, which are doable after reading Chapter 1 of *The Logic Manual,* are contained in the file logic_prep_ex.pdf: hand in your work at the lodge as soon as you arrive, and ask the porter to put it in Jonathan McIntosh's pigeonhole.**

In your second term you'll be doing some more advanced logic. This won't follow any particular textbook; but to get a foretaste you could, for example, take a look at David Bostock's book *Intermediate Logic*.

A good place to study some philosophical questions about logic and language is Mark Sainsbury's book, *Logical Forms*, 1st or 2nd edition (Blackwell), chapters 1 and 2. And for some wider-ranging reading in the area of logic, you might look at the following: P.T. Geach's *Reason and Argument* and Mark Sainsbury's *Paradoxes.* Geach is brief and basic, and he aims to show that logic is important for philosophy at large. Sainsbury presents a sustained discussion of some particular intellectual knots. (He includes a discussion of heaps of sand.)

General Philosophy

The syllabus is based around a list of specified topics: knowledge, scepticism, induction, primary and secondary qualities, the relation of mind and body, personal identity, free will, and the Problem of Evil. Let me suggest a few books which will both provide some background for this specific syllabus and, more generally, get you used to how philosophy is done.

First two very introductory things: Thomas Nagel, *What does it all mean?*; and Simon Blackburn, *Think*. Nagel's book is very short and accessible, but very skilfully written—it doesn't talk down to the reader—and chapters 2, 3, 4, and 6 are directly relevant to the first-year syllabus (chapters 7 and 8 are relevant to moral philosophy).

Next there are two books which were written as introductions but which have acquired something of the status of (semi-)classics: Bertrand Russell, *The Problems of Philosophy*; and

Peter Strawson, *Analysis and Metaphysics: An Introduction to Philosophy*. In Russell's book the first six chapters are directly relevant to the first-year syllabus, and in Strawson's the first five.

You should not, however, feel restricted to the reading mentioned above. There is an important skill which you should learn to develop, viz. discovering for yourself books that you get on with—by browsing in libraries or in book shops.

Leibniz-Clarke

The syllabus is principally an introduction to the philosophy of space and time, and it is hung around correspondence between Leibniz and Clarke—to be studied in H.G. Alexander (Ed), *The Leibniz-Clarke Correspondence* (Manchester University Press). It would be useful to get acquainted with this text.

For more general reading you might look at: A. F. Chalmers, *What is This Thing called Science?* and R. Harré, *Philosophies of Science.* These books are useful introductions to current issues in the Philosophy of Science.