PHILOSOPHY TRIPOS     Part IB

Monday  28  May  2012  09.00 to  12.00

Paper 2
LOGIC

Answer three questions only.

Write the number of the question at the beginning of each answer. If you are answering an either/or question, indicate the letter as well.

STATIONERY REQUIREMENTS
20 Page Answer Book x 1
Rough Work Pad

You may not start to read the questions printed on the subsequent pages of this question paper until instructed that you may do so by the Invigilator.
'The use of words is to be sensible marks of ideas, and the ideas they stand for are their proper and immediate signification.' Discuss.

In what sense of 'convention', if any, is it true that meaning is fixed by convention?

Can a theory of truth provide a satisfactory account of meaning?

Must we quantify over a domain?

How did Frege solve the problem of multiple generality?

'Valid arguments in English are valid in virtue of their logical form. Similarly, invalid arguments are invalid in virtue of their logical form.' Discuss.

Are empty names such as 'Vulcan' a problem for a semantic theory?

Is Frege's semantics committed to an infinite hierarchy of senses? Why does it matter?

How much must we know about something for our words to denote it?

What is the law of excluded middle? Is it a logical truth?

Describe a language for propositional modal logic.

Expound a Kripke semantics for the language using the idea of truth at a world in a Kripke frame, under a valuation. Define the notions of logical truth and logical consequence.

Describe a Kripke frame and a valuation according to which \( \Diamond A \rightarrow \Box \Diamond A \) is false at some world in the frame, under the valuation.

'A theory of possible worlds cannot do without primitive modality, since possible world is itself a modal notion. But the theory is none the worse for that.' Discuss.

How, if at all, can one prove the consistency of a mathematical theory?