## PHT1/2

## PHILOSOPHY TRIPOS Part IB

Monday 30 May 2011

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 the 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

- 1 If we can explain meaning in terms of intention, what will we have achieved?
- 2 **Either** (a) What is the relation between meaning and truth?
  - **Or** (b) What use would a solitary person have for language?
- 3 Describe and assess Frege's explanation of the role of variables in the semantics of quantified sentences.
- 4 What is the point of putting English sentences into logical form?
- 5 Describe and assess Russell's reasons for adopting his theory of descriptions.
- 6 Is rigidity just a matter of scope?
- 7 Expound a semantics for the modal logic T. Use this semantics to show that
  - (a)  $\models_T \Box A \supset A$
  - (b)  $\nvDash_{\mathsf{T}} \Box \mathsf{A} \supset \Box \Box \mathsf{A}$
  - (c)  $\nvDash_{\mathsf{T}} \mathsf{A} \supset \Box \Diamond \mathsf{A}$
  - (d) the rule of necessitation is valid
- 8 Is modal fictionalism a satisfactory explanation for our use of words like 'necessarily' and 'possibly'?
- 9 Are there any good reasons for preferring intuitionistic to classical logic?
- 10 Does consistency entail existence, either in mathematics or elsewhere?

## END OF PAPER