

PHILOSOPHY TRIPOS Part IB

Monday 25 May 2009

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**

- 1 **Either** (a) 'Sentence meanings are nothing but fossilized communicative intentions.' Discuss.
- Or** (b) What is the relation between meaning and force?
- 2 Can a theory of truth serve as a theory of meaning?
- 3 Is being being the value of an existentially quantified variable?
- 4 Why is Frege's account of quantification an important accomplishment?
- 5 **Either** (a) ' $(P \wedge Q)$ and $(P \vee Q)$ have the same grammatical form. So even in propositional logic, grammatical form misleads as to logical form.' Discuss.
- Or** (b) How many argument terms does the verb 'kicked' take?
- 6 **Either** (a) What metaphysical puzzles did Russell attempt to solve with his Theory of Descriptions? Was he successful?
- Or** (b) What problems was Frege trying to solve with his theory of sense? Was he successful?
- 7 Must a name be tied to its bearer by causal links?
- 8 **Either** (a) Does any set of inference rules define a logical constant? If not, why not?
- Or** (b) How could the law of excluded middle not be valid?
- 9 **Either** (a) Which modal logic is the right modal logic for the notion of logical necessity?
- Or** (b) Carefully describe the standard semantics for the modal logic T . Show that, on that semantics, the proposition $\Box(P \supset \Box Q) \supset (\Box P \supset \Box Q)$ is a modal logical truth, but $(\Diamond P \supset \Box \Diamond P)$ isn't. What needs to be added to the semantics to make the latter a modal logical truth?
- 10 **Either** (a) 'If the arbitrarily given axioms do not contradict each other with all their consequences, then they are true and the things defined by the axioms exist. This is for me the criterion of truth and existence' (HILBERT). Discuss.
- Or** (b) What is it for a theory to be categorical? Why does it matter?

END OF PAPER