

**PHILOSOPHY TRIPOS Part IB**

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Friday 28 May 2010

09.00 to 12.00

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Paper 6

PHILOSOPHY OF SCIENCE

*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 Should we believe in electrons?
- 2 What does scientific realism have to do with scientific rationality?
- 3 **Either** (a) Is there an account of laws of nature which tells us how scientists are able to discover them?  
**Or** (b) Is there any good sense in which a law of nature is necessary?
- 4 **Either** (a) Assess the deductive-nomological model of explanation.  
**Or** (b) 'A satisfactory explanation is one that satisfies; nothing more can or need be said.' Discuss.
- 5 What is the tautology problem in the philosophy of biology? Is it really a problem?
- 6 **Either** (a) Are equal a priori probabilities ever justified?  
**Or** (b) 'Probabilities cannot be subjective, since they coincide with long-run relative frequencies.' Discuss.
- 7 What do the paradoxes of confirmation tell us about evidence?
- 8 Is there an interesting difference between theory and observation?
- 9 Is Kuhn right that theory change is importantly non-rational?
- 10 Can a theory be falsified? Does it matter?

END OF PAPER