PHILOSOPHY TRIPOS     Part IB

Friday  28  May 2010        09.00 to 12.00

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