PHILOSOPHY TRIPOS Part IB

Wednesday 30 May 2012

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

– 2 – PHT1/6

- 1 Has Popper solved the problem of induction?
- 2 **Either** (a) Are scientific revolutions rational processes?
 - **Or** (b) Can we tell in advance if a research programme is worth pursuing?
- 3 Is there a scientific method?
- 4 Does the success of science support scientific realism?
- 5 Are laws of nature just universal generalisations?
- What are the differences between explanation and prediction? Are they philosophically significant?
- 7 'We have no reason to believe that our successful theories are true, because most successful theories have been discarded.' Discuss.
- 8 **Either** (a) Is probability just degree of belief?
 - **Or** (b) Is probability just frequency?
- 9 'If there are any laws of biology, they are knowable a priori.' Discuss.
- 10 What is the relationship between a trait's evolutionary history and its biological function?

END OF PAPER