PHILOSOPHY TRIPOS     Part IB

Friday 03 June 2011 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 Does the history of science give us good reason to think that our current best theories will also turn out to be badly mistaken?

2 'Believing that atoms exist involves no more than believing that the atomic theory is predictively successful.' Discuss.

3 Could the observation of a white swan ever count as evidence that all ravens are black?

4 What does Goodman's 'new riddle of induction' tell us about induction?

5 'To explain an event, you need to know what causes it.' Discuss.

6 'The distinction between laws of nature and accidental generalizations is just a matter of our attitudes to them.' Discuss.

7 Should we be Popperian falsificationists?

8 Either (a) 'On Kuhn's view, scientific revolutions are never rational.' Discuss.
   Or (b) What is the incommensurability thesis? Should we believe it?

9 'The function of the heart is to pump blood.' How should we analyse the notion of function here?

10 'Evolution cannot explain altruism.' Discuss.

11 Either (a) What does Lewis's Principal Principle tell us about objective chance?
   Or (b) Is there a defensible form of the frequency interpretation of probability?

END OF PAPER