## 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

– 2 – PHT1/6

- 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.
- '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