

PHILOSOPHY TRIPOS Part IB

Tuesday 27th May 2014

09.00 – 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 the 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 manipulation of 'theoretical entities' make realism about these entities any more justifiable?
2. Does science progress? If so, in terms of what does it progress?
3. EITHER (a) Consider the problems that plague existing theories of scientific method. Does that make it likely that there is no scientific method?

OR (b) What, if anything, makes science a privileged method for generating knowledge?
4. Is there a defensible formulation of falsificationism?
5. 'Bayes's theorem is nothing but a logical consequence of the definition of conditional probability, so it couldn't possibly help in solving the problems of induction.' Discuss.
6. Can we avoid taking evidence to confirm 'grue-like' hypotheses?
7. In what sense, if any, do laws of nature 'govern' phenomena?
8. Is there a difference between explanation and understanding?
9. In what sense, if any, is probability subjective?
10. 'Quantum Mechanics provides an incomplete description of physical reality.' Discuss.

END OF PAPER