

**PHILOSOPHY TRIPOS Part II**

---

Friday 23 May 2003

1.30 to 4.30

---

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.*

**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 What is structural realism? Does it provide an adequate response to the pessimistic induction?
- 2 What sense, if any, can we make of the idea of a theory's being approximately true?
- 3 When, if at all, are rival theories incommensurable? Does it matter if they are?
- 4 Should we believe our best theories or merely accept them as being empirically adequate?
- 5 What is the strongest argument against Bayesian confirmation theory? Does the Bayesian have a satisfactory reply?
- 6 **Either** (a) Does explanation involve unification?  
**Or** (b) What makes for a good functional explanation in biology?
- 7 **Either** (a) Do the laws of physics lie?  
**Or** (b) Are laws relations between universals?
- 8 What are natural kinds?
- 9 **Either** (a) Should we be substantivalists about space-time?  
**Or** (b) Can a relationist about space allow for the existence of incongruent counterparts?
- 10 In what sense, if any, is geometry conventional?
- 11 Critically assess the Copenhagen Interpretation of quantum mechanics.
- 12 **Either** (a) Discuss the EPR paradox and Bohr's response to it.  
**Or** (b) What is the significance of Bell's theorem?

END OF PAPER