

NATURAL SCIENCES TRIPOS Part III

Questions released at 12 noon on Monday 11 February 2013
Answers to be submitted by 12 noon on Monday 18 February 2013

HISTORY AND PHILOSOPHY OF SCIENCE

Before you begin read these instructions carefully:

*Students taking Natural Science Tripos Part III **History and Philosophy of Science** should answer **two** questions from the following list of eight questions.*

*The two essays should be submitted in duplicate to the Departmental Office by 12 noon on Monday 18th February 2013. Students are also required to upload their examinable work as a .doc or .rtf file to the **closed and confidential** HPS MPhil / Part III site on CamTools. The examiners may use this to check word count or derivative passages.*

*On the top of the first page of each essay, indicate the question number, and your name and college. Each essay should be typed on only **one** side of the paper and firmly stapled.*

When handing in your essays attach a completed coversheet (downloadable from Camtools) to the bundle, giving your name and listing the questions attempted.

NST Part III History and Philosophy of Science

*Answer any **two** questions. Each answer should not exceed 2,500 words.*

1. Do scientists' production and use of images show that scientific data are artificial?
2. Do numbers have a social life?
3. Are experimental outcomes shaped more by the instruments used or by the aims and skills of the experimenter? Respond with reference to examples.
4. How does Foucault's concept of 'power-knowledge' affect our view of the sciences?
5. Can scientists avoid using ethical values in theory acceptance? Should they?
6. Must we believe in reality of causes to make sense of idealization?
7. Is there any reason for thinking that explanatory power is a guide to truth?
8. Are there situations in which science indisputably makes progress? Discuss with reference to examples.

END OF PAPER