

NST3HP  
Natural Sciences Tripos Part III: History and Philosophy of Science

---

Questions released at 12 noon on Wednesday 6 March 2019  
Answers to be submitted by 12 noon on Wednesday 13 March 2019

---

**Before you begin read these instructions carefully:**

*Students should answer **two** questions from the following list of twelve questions.*

*The two essays should be submitted in duplicate to the Departmental Office by 12 noon on Wednesday 13 March 2019. Students are also required to upload their examinable work to the HPS Part III Coursework site on Moodle. The examiners may use this to check word count or derivative passages.*

*Essays should be marked 1, 2, 3, etc. according to the number of the question attempted. The essays should be typed on only **one** side of the paper and each essay should be firmly stapled.*

*Hand in your essays with a completed submission form (downloadable from Moodle) listing the number of each question attempted.*

### **NST Part III History and Philosophy of Science**

#### Set essays

*Answer any **two** questions. Answers should not exceed 2,500 words each.*

1. “Philosophy of science without history of science is empty; history of science without philosophy of science is blind” (Imre Lakatos, 1970). Discuss.
2. Why can textbook illustrations take a long time to be replaced, and how has this mattered?
3. “The idea that some lives matter less is the root of all that’s wrong with the world” (Paul Farmer 2003, Partners in Health). Analyse with respect to the history of international and global health.
4. Must we run inductive risks?
5. Is the capacity to facilitate inferences a necessary condition for scientific representation? Is it sufficient?
6. What is the significance of maintenance and repair for the careers of scientific instruments?
7. Can counterfactuals establish historical causation?
8. What might a species history of climate change involve, and should providing one be a goal?
9. “Communicating is the doing of science” (Scott Montgomery, 2002). Do you agree?
10. Are mental disorders natural kinds? What consequences, if any, does the answer have for how we think about these disorders?
11. How did the concept of the “scientific instrument” change through history?
12. Could causes be later in time than their effects?

**END OF PAPER**