# UNIVERSITY OF CAMBRIDGE

#### NST2BBS

Natural Sciences Tripos Part II: Biological and Biomedical Sciences

Wednesday 6 June 2018 09.00-12.00

#### Paper 45

#### Philosophy and Ethics of Medicine

You should answer **four** questions in total. Answer **at least one** question from Section A and **at least one** question from Section B. All questions carry equal weighting.

Begin each answer on a separate sheet.

Write legibly and on only **one** side of the paper.

Answers must be tied up in separate bundles, marked 1, 2, 3, etc. according to the number of the question.

Attach a completed coversheet to each bundle and complete a master coversheet listing all questions attempted. It is essential that you write your examination number and **not** your name on the coversheet and on **each** bundle.

You may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so by the invigilator. SECTION A: Philosophy of Medicine

- 1. Can medicine rely on evidence from animal experiments to make inferences about the effectiveness of interventions in humans?
- 2. Compare the Bayesian model of scientific inference with the frequentist model of scientific inference. Which is superior?
- 3. What, if anything, is the right definition of disease?
- 4. Can health be measured by eliciting preferences?
- 5. Is comparative process tracing a reliable method for extrapolation?
- 6. Should randomised trials be the gold standard for clinical research?
- 7. Does cost-effectiveness analysis using Quality Adjusted Life Years discriminate against people with disabilities?

SECTION B: Ethics of Medicine

- 8. Can one consistently be pro-choice and a vegetarian?
- 9. Should doctors ever kill terminally ill patients?
- 10. Should we ban cigarettes?
- 11. Intellectual property should be eliminated in medical research. Discuss.
- 12. Informed consent is important in both research and treatment contexts, but is it important for the same reasons?
- 13. Is the argument from inductive risk compelling?
- 14. Are cancer screening policies that target large, "moderate risk" groups unethical?

## END OF PAPER

# UNIVERSITY OF CAMBRIDGE

### NST2BBS

Natural Sciences Tripos Part II: Biological and Biomedical Sciences

Monday 4 June 2018 09.00–12.00

Paper 65

### Early Medicine

You should answer three questions. All questions carry equal weighting.

Begin each answer on a separate sheet.

Write legibly and on only **one** side of the paper.

Answers must be tied up in separate bundles, marked 1, 2, 3, etc. according to the number of the question.

Attach a completed coversheet to each bundle and complete a master coversheet listing all questions attempted. It is essential that you write your examination number and **not** your name on the coversheet and on **each** bundle.

You may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so by the invigilator.

- 1. Why did medieval and early modern medical authors look to Ancient sources?
- 2. How did non-Chinese traditions influence theories and practices of medicine in China during the Ming and Qing dynasties?
- 3. Was experience or theory more important for medical practice before 1650?
- 4. Why did early modern physicians criticise other kinds of healers?
- 5. "Medicine from below". What does this perspective bring to the history of medieval and early modern medical encounters?
- 6. Why did anatomy become so important in the sixteenth and seventeenth centuries?
- 7. Discuss the importance of astrology in medical prognosis in the medieval and early modern periods.
- 8. What difference did 1492 make to European medical practice?
- 9. "A time of profound transformation in the science of sexuality" (Londa Schiebinger, 1993). How apt is this description of the early modern period?
- 10. What did lay people in the seventeenth century learn from medical publications?
- 11. What advantages did apothecaries have over physicians in early modern Europe?
- 12. Discuss the relationship between state borders and disease in the early modern period.
- 13. How did the Black Death change medical practices?
- 14. When would an early modern physician advise his patient and the patient's family to call a priest?
- 15. How might a scholar writing in 1600 describe the difference between a man's and a woman's body?

## END OF PAPER

# UNIVERSITY OF CAMBRIDGE

### NST2BBS

Natural Sciences Tripos Part II: Biological and Biomedical Sciences

Monday 4 June 2018 13.30–16.30

#### Paper 66

### Modern Medicine and Biomedical Sciences

You should answer three questions. All questions carry equal weighting.

Begin each answer on a separate sheet.

Write legibly and on only **one** side of the paper.

Answers must be tied up in separate bundles, marked 1, 2, 3, etc. according to the number of the question.

Attach a completed coversheet to each bundle and complete a master coversheet listing all questions attempted. It is essential that you write your examination number and **not** your name on the coversheet and on **each** bundle.

You may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so by the invigilator.

- 1. "Far from revolutionary, the Clinical School of early nineteenth-century Paris in fact represents but one more step in a process of gradual change." Assess this claim.
- 2. "During the nineteenth century, experimental physiology owed more to the clinic than it gave." Assess this claim.
- 3. "Men and women naturally occupy separate spheres." What relevance did such views have to nineteenth-century medicine?
- "In the second half of the nineteenth century, physiology and bacteriology displaced anatomy as surgery's reference sciences." Discuss.
- 5. How and why did "diseases of the tropics" become "tropical diseases"?
- 6. How were X-rays introduced into clinical practice?
- 7. In what ways, and to what extent, did commercial interests shape twentieth-century medical science?
- 8. How did trials of new medicines change between 1918 and 1968?
- 9. Was World War II the great turning point in the history of twentiethcentury medicine? Why or why not?
- 10. What difference have users' demands made to reproductive technologies since World War II?
- 11. Why were so many people disillusioned with medicine by the 1970s?
- 12. How did ethical considerations shape research on human subjects after World War II?
- 13. Why were nineteenth-century public health reformers so preoccupied with the condition of the urban environment?
- 14. To what extent did medicine become an "applied science" in the first half of the twentieth century?
- 15. How, and with what consequences, did childbirth move from home to hospital?

### END OF PAPER