

Examples of possible questions on the examination. The exam will consist of 4–5 questions.

1. What is an *ad hoc* hypothesis? Give an example of one, and explain why one should avoid making *ad hoc* hypotheses?
2. Do values have any role to play in science?
3. What is the hypothetico-deductive method? Explain the difference between a verification and a falsification using the hypothetico-deductive method.
4. What is the difference between explanations of historical events and other types of explanations? What does that difference tell us about the possibility of justifying the explanation?
5. What is the problem of induction? Does induction really have a role to play in science?
6. What is a scientific paradigm and how do they influence science? Are they good or bad?
7. What does it mean for a scientific hypothesis to be falsifiable? Why is it good that they are falsifiable?
8. In what way are observations theory-dependent, and why does that challenge the idea that hypotheses are generated from observations?
9. What is the deductive-nomological model for scientific explanations? Explain its pros and cons.
10. What reasons can you have for being a realist, and how good are they really? Are they bad enough to consider anti-realism as a reasonable position?
11. What are social constructions? Can a computer game be a social construction?
12. What is the difference between natural and human science?

As a rule of thumb, consider approximately one A4 page per question. Every question can give you up to 4 points.