Philosophy of science comp sample questions

A. General philosophy of science

1. Do historical considerations connected with theory change pose a threat to scientific realism? Explain why this has been contended. Outline and evaluate one avenue of response from scientific realists.

2. Explain the difference between Bayesian and error-statistical approaches to scientific inference. What problems does each face?

3. Explain Douglas' argument that there is a role for non-epistemic values to play in science that is both legitimate and required. What is this role, according to her?

4. Explain, and critically evaluate, the claim that thinking in terms of mechanisms provides explanatory insight not readily available from traditional accounts of explanation.

5. Is the manipulability view of causation adequate for the use of causal concepts in science? Why or why not?

6. Explain the multiple realizability argument against reduction. Does it succeed?

B. These will vary depending on the area of specialization of the candidate. Here are a few samples.

Sample questions for philosophy of physics:

1. What spacetime structure is presupposed by Newtonian gravitational theory? Defend your answer against at least one rival proposal.

2. Explain the "primitive ontology" approach to interpreting quantum theory. What problems is it meant to solve? Does it succeed?

Sample questions for philosophy of psychiatry:

1. Ian Hacking claims that mental disorders are subject to "looping effects". What are "looping effects" and what are the purported implications of such effects for "kind" status of mental disorders?

2. Explain the significance of the concept of value-based psychiatry and medicine compared to competing visions of psychiatry as a branch of medical science. What are the prospects for this approach in your view? Refer to two examples in your answer.