MODERN EUROPEAN SCIENCE EXAM

Write an essay on one topic from Part I and one from Part II (2 hours per question). Be specific about historical episodes and evidence and include reflections on the relevant historiography of the topic. Take care to avoid overlap in your choice of examples and evidence for your two essays.

Part I.

1. Discuss the significance of standardization, as it has been understood by historians and other interpreters of science, for the history of modern science and technology.

2. How have historians explained, and how would you explain, the growing role of quantification and statistics in science, social science, and technology in the modern period?

Part II.

1. Contemporary historians of science have turned their attention especially to the materials, instruments, practices, and places of science, rather than only ideas. Drawing on particular works with which you are familiar, give an account of the value of this turn in historiography. For what sorts of issues is it particularly valuable? What kinds of problems does it avoid or remedy? Does it have weaknesses?

2. The “Second Industrial Revolution” is identified with the chemical and electrical industries of the 2nd half of the 19th century, but also with railroad and telegraph networks, rationalization of work, and a new sense of speed. Discuss the relationship of these developments to the character and content of the physical sciences of the period, drawing on specific historical works.