PHILOSOPHY 222: PHILOSOPHY OF SCIENCE
FINAL EXAMINATION: SATURDAY, JANUARY 27, 1996
AT 8:00 A.M. IN ROOM 321 NICELY
TIME: 2 1/2 HOURS
PROF. K. FERGUSON

INSTRUCTIONS: **You will be asked to answer two or three questions selected from among the following:**

1. Is there any important element of truth in Popper's falsificationist theory of science which survives the many objections which have been raised against it?

2. "The simplicity of a theory makes it likable but not likely to be true." Discuss with reference to particular examples.

3. Is there any essential component of scientific method which is not already fully embodied in pre-scientific belief formation?

4. In *The Structure of Scientific Revolutions* Kuhn argues that rival paradigms (e.g., Newtonian Mechanics and Relativity Theory) are incommensurable. What does he mean by this? Do you agree?

5. Are there any theory independent methods of inquiry in science?

6. How damaging is the argument from past failures in the history of science to scientific realism?

7. Is there any plausible explanation of the striking predictive and explanatory success of well accepted scientific theories other than their approximate truth?

8. Why is it that the Quantum Theory has been thought to undermine the traditional realist assumption that there is an independently existing physical reality? Can any plausible defense of realism be constructed?