

**PRELIMINARY EXAMINATION FOR THE Ph.D. DEGREE**

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**Answer one question from each section**

**SECTION I**

1. Present and discuss, within the Neoclassical Growth Model, the two popular empirical techniques of Growth Accounting and Convergence Regressions. What questions can be addressed using each technique? Referring to specific important articles from the literature analyze which facts have been established about growth using each technique and which facts are still controversial.
2. *"Growth of human capital, mainly generated by increased schooling, has been the main cause of growth for the U.S. economy in the last fifty years. Difference in schooling is also the main reason for difference in income per capita across countries."* Say if this statement characterizes accurately the consensus emerging from the empiric literature in the recent years. Discuss and/or challenge the statement, referring, in particular, to the work of Charles Jones (and coauthors) and Peter Klenow (and coauthors).
3. *The U.S. economy experienced a "skill-biased technological shock" during the eighties.* In the context of a simple model, say what are the data and facts that support this statement. Then illustrate and discuss a model that provides an explanation of this phenomenon (i.e., why such a technological shock happened).
4. The article by Mankiw, Romer, and Weil 1992 (MRW) and the one by Hall and Jones 1999 (HJ) both "explain" cross country differences in income per capita decomposing them in contributions of capital K, human capital H, and residuals A. However they reach somewhat different conclusions. MRW claim that K and H explain most of the differences, while HJ find a very large role for A. Compare the two methods of analysis and analyze the reasons for their divergence.

**SECTION II**

5. Name one country whose output rose despite big-bang reforms and one country whose output fell despite gradual reform. Explain why output fell in some transition economies upon reform, and why output rose in some others.
6. Review critically the findings of various growth regressions, particularly those of DeLong-Summers, Easterly-Rebelo, and King-Levine.

7. Economic management in the 1980s was advised to focus on "getting prices right", the slogan in the 1990s was "getting institutions right." Explain the basis of the broader approach to economic development, especially the importance of this broader approach to increasing the rate of technical innovation.
8. What implications does the theory of the second best have for the conduct of economic policy? How are the findings of several multi-country studies on the economic effects of industrial policies (as measured by the effective rate of protection) relevant to the assessment of the applicability of the theory of the second best?

### **SECTION III**

9. What is the Great Divergence? What are its main quantitative features? Discuss some of the main controversies surround the Great Divergence: When did it begin? Where did it begin? Why did it happen? Has it been exacerbated by globalization?
10. Several authors have tried to lay out a unified growth model that can describe the evolution of an economy from a "Malthusian trap" through to "modern economic growth" (whether exogenous or endogenous). Describe in detail three such models and then compare and contrast their approaches. According to Clark, which features of these models look problematic?
11. Capital does not flow very plentifully to poor countries today. Does this reflect (a) the poor countries' low productivity? (b) their distortions? (c) their weak institutions (country risk)? (d) other forces? Discuss. Contrast with conditions in the 1870–1914 era.
12. Do you think Robert Mugabe would enjoy reading the paper by "Colonial Origins..." by Acemoglu/Johnson/Robinson? And should he enjoy it so much?