

TIME: 4 Hours

MAXIMUM POSSIBLE SCORE: 240 Points

IMPORTANT INSTRUCTIONS: This examination contains questions totaling 320 points. You are asked to answer questions of your choice, totaling 240 points. If you answer questions totaling any amount up to 240 points, you will be scored on those questions, as usual. If you answer questions totaling M (any amount More than 240 points), you will be scored on all the questions you have answered, and your total score thus obtained will be multiplied by the factor $(240/M)$, to adjust it to a 240 point basis. In short, going beyond 240 points will not automatically add to your grade. It will do so only if the "added" answers help to pull up your average on your "earlier" answers. Also, it can similarly pull down your average.

I. (50 Pts.) State whether you believe each of the following statements to be TRUE, FALSE or UNCERTAIN. In each case, write a few sentences explaining your answer. Your grade will depend heavily on your explanation.

- 1) The social benefit that accrues when a project "absorbs" 100 workers who would otherwise be unemployed consists of the income that those workers obtain from the project.
- 2) If a project is located in a "protected sector" of the labor market, the social opportunity cost of labor will be higher than it would be if that project were located in the "unprotected" part of the same labor market.
- 3) Under capital rationing, it is equivalent
 - a) to assign shadow prices to funds (in the years of scarcity) or
 - b) to assign one-year rates of discount higher than the normal, long-term opportunity cost of funds, to the years in which the scarcity applies.
- 4) When there is a situation of migration-fed unemployment, the social opportunity cost of labor (in the cities to which migration occurs) will be higher if the migrants put a relatively high value on their leisure (i.e., non-work) time than it will be if they put a low or zero value on such time.

Development Economics Comp

- 5) When there is a hierarchy of protected-sector wage rates ($W_{p1} > W_{p2} > W_{p3}$, etc.), for a given class of labor, then the introduction of a new demand for labor (say, by the installation of a new plant by a multinational firm) will cause the social opportunity cost of labor to rise in all protected sectors, but it will rise by a smaller percentage for labor hired at W_{p1} than labor hired at W_{p2} .
- 6) If a country has a uniform tariff on all imports at the rate of T , a project which induces an increase of 100 in that country's exports will give rise to an external benefit equal to $100T$.
- 7) An old asset should be replaced by a new one when the present value of expected benefits from the new asset exceeds the present value of the expected benefits of the old asset by more than by excess of the price of the new asset over the sale value of the old asset.

II. (20 Pts.) Explain what is "new" about the new growth theory and its relevance in explaining observed differences in growth rates.

III. (30 Pts.) A number of authors have recently argued that capital controls would reduce developing countries' vulnerability to external shocks. Derive a simple model of an open economy, and analyze the effects of capital controls on:

- 1) domestic interest rates;
- 2) the equilibrium real exchange rate
- 3) savings;
- 4) investment.

In light of your answers to 1) through 4) do you agree that capital controls really do reduce vulnerability?

Development Economic Comp

IV. (30 Pts.) It is well known that firms in developing countries rely more heavily on bank credit than firms in industrial countries. [In other words, firms in developed countries can more easily raise money through equity or commercial paper.] Based on this, it has been argued that the banking system has played an important role in amplifying the boom-bust cycles in emerging countries induced by capital inflows/outflows. Evaluate critically this notion. Do you agree or disagree? What sort of evidence would you look for to test this hypothesis? What sort of model would you use to organize your thoughts?

V. (20 Pts.) Explain the distinction between intensive and extensive growth and its relevance for poverty alleviation.

VI. (30 Pts.) Consider a country like Argentina with the following characteristics:

- It has had a completely fixed exchange rate (a quasi-currency board) since April 1991 after 40 years of very high and unstable inflation.
- The 1991 stabilization brought down inflation to international levels and the average rate of growth has been much higher than in the previous decade.
- On the other hand, negative shocks (like the Tequila crisis in late 1994-early 1995 and the more recent January 1999 Brazilian devaluation) have led to severe economic contractions.

In this context, discuss the following:

- What are the pros and cons of having a fixed exchange rate in a country such as Argentina? Does it depend on the particular circumstances of a country or are there some universal principles?
- How does a country with a fixed exchange rate adjust to a negative shock? Do you expect the adjustment to be more severe than under an alternative exchange rate regime? (You may want to use some simple model to organize your thoughts on this issue.)
- Would you consider devaluing today in Argentina? Why or why not?

Development Economics Comp

VII. (30 Pts.) Write an essay on real exchange rate misalignment. Make sure to cover the following points:

- 1) How is the equilibrium real exchange rate (RER) defined;
- 2) What are the main determinants of the equilibrium RER;
- 3) What are the possible sources of misalignment;
- 4) What are the possible ways of dealing with misalignments;
- 5) How useful are existing models to assess misalignment.

VIII. (20 Pts.) Assess the effects of trade liberalization on the real wage when capital is immobile in the short run but mobile in the long run.

IX. (30 Pts.) Write an essay on the rationale behind using a "weighted average" method for arriving at the social opportunity cost of foreign exchange, of capital and of labor.

- 1) Explain how the weights in the weighted average can be described as "sourcing coefficients". In the theory of the subject, what do these sourcing coefficients mean? How, ideally, would you "derive" them?
- 2) What are the items that these weights multiply in each of the three cases mentioned -- foreign exchange, capital and labor? Present two versions of your answer to this question, and indicate which version is more appropriate (more rigorous), and why.
- 3) Can you think of situations in which, given "sourcing coefficients" that add up to one, you would want also to include in the calculation activities that are not directly covered by these "sourcing coefficients"? If so, give examples. If not, explain why the "sourcing coefficients" cover all relevant activities.
- 4) In the case of the social opportunity cost of capital, explain the relative merits of basing the "sourcing coefficients" on a taxation exercise versus a "capital market exercise".

Development Economics Comp

X. (20 Pts.) Liberalizing international trade may be counterproductive if labor markets are affected by distortions such as minimum wages.

State whether you agree or disagree with the above statement. Derive a simple model to justify your position.

XI. (20 Pts.)

- 1) "Traditional agriculture is efficient but poor". Discuss.
- 2) Explain how the socially optimal choice of techniques should be determined in a labor-abundant economy.

XII (20 Pts.) Discuss the question of how useful the concept of purchasing power parity (PPP) is for the analysis of economic problems in today's world. Under what circumstances do you think this concept would be put to its "best" use? Does it have significant weaknesses even under these "best-use" circumstances?