

Development Economics

TIME: 4 hours

MAXIMUM POSSIBLE SCORE: 240 Points

I. (60 Pts.) TRUE, FALSE, or UNCERTAIN. In each case give a clear explanation of your answer. Your grade will depend heavily on your explanation.

1. In an electricity system containing five different types of thermal capacity (with the plants of any one type being fully homogeneous), a system based on marginal cost pricing and its corresponding investment criteria will require only one peaktime surcharge.
2. The two systems -- i) an economic cost of capital of $\omega = 10\%$, with a "shadow price of investible funds" (SPIF) equal to unity, and ii) an economic cost of capital of $r = 4\%$, with a SPIF equal to 2.5 ($= \omega/r$) -- give equivalent results for projects whose costs are concentrated in a single period and whose benefits take the form of a constant-level perpetuity.
3. The opportunity cost of labor is obtained by estimating, for each worker, the salary that he would get in the best opportunity that he faces in the labor market.
4. A situation of migration-fed unemployment cannot arise without the existence of some distortion in the labor market that prevents the wage rate from performing its natural equilibrating function.
5. Since electricity projects typically have benefit profiles that decline over time, once they are placed in service, there is never a sound basis for simply postponing such a project -- the rule is, "do it now or not at all."
6. The internal rate of return of a project is a correct criterion for acceptance or rejection, so long as the project has a "normal" profile -- i.e., first a series of negative investment flows, followed by a period of positive flows as the project moves into its operating phase.
7. The economic opportunity cost of foreign exchange is the market exchange rate, adjusted upward to reflect taxes (on imports and exports) and downward to reflect subsidies (to imports and exports).
8. If a project raises from $L_1 w_1$ to $L_2 w_2$ the sum total of wages paid to a category of poor workers (with a distributional weight of $(1+\lambda)$), then a distributional weights framework would assign to that project a distributional benefit equal to $\lambda(L_2 w_2 - L_1 w_1)$.

II. (20 Pts.) Critically examine the case for land reform based on the inverse relationship between farm size and productivity of land.

III. (30 Pts.)

- 1) Exchange rate-based stabilizations typically lead to a real appreciation of the domestic currency, which has led to an intense policy debate as to whether a “corrective” devaluation should be undertaken at some point or not. Discuss the pros and cons of such a remedy (and, if possible, refer to actual experiences to illustrate your arguments).
- 2) All things considered, do you think that exchange rate-based stabilizations are effective policies or do you feel that, more often than not, short-run gains come at the expense of future costs? (Be very explicit about the tradeoffs involved.)

IV. (20 Pts.) Critically examine the case for establishing welfare states in developing countries.

V. (25 Pts.) Any state within the United States could run very large “current account deficits” for a prolonged period of time without that provoking any major crisis. This does not seem to be the case with sovereign countries. Why?

VI. (20 Pts.) The so-called “dual labor market” model posits a “protected sector” wage that is somehow kept above the “free-market wage” for any given type and quality of labor.

- 1) Derive the economic opportunity cost of labor in such a “dual labor market” situation. Do so for two cases -- one, where the project in question is hiring labor on the free market, the other where the project’s hiring is done at the protected-sector wage.
- 2) Assume now that there are different protected-sector wages -- w_{p1}, w_{p2}, w_{p3} , etc. Explain how you would calculate the economic opportunity cost of labor hired by the project in question at any such wage (w_{pj}).

VII. (20 Pts.) Explain why a crisis is usually needed to reform repressed economies.

VIII. (25 Pts.) Many developing countries seem to go through repeated cycles of major economic booms followed by sharp economic and financial crises. This does not seem to be the case for industrial countries (which seem to be subject to a much milder business cycle). Why do you think that is the case? Is it bad luck, bad policies, bad institutions, or something else?

IX. (20 Pts.)

- 1) Critically examine the theory and evidence for “conditional convergence”.
- 2) Show how the “new” AK models are just variants of the Harrod-Domar model.