

DEPARTMENT OF ECONOMICS
QUEEN'S UNIVERSITY

ECON239: DEVELOPMENT ECONOMICS

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Final Examination

7:00 – 10:00 pm, Monday, April 17, 2006

General Instructions

This exam is THREE HOURS long. There are TWO SECTIONS each of which is worth 50 percent of the overall marks. Section A consists of eight short questions of which you should do five (5). Section B consists of four long questions of which you should do two (2).^{*} Please answer all questions in the answer booklets provided.^{**} If you attempt more than the required number of questions in each section make sure you delete the ones that you don't want marked. Hand held calculators are allowed.

GOOD LUCK!

* The candidate is urged to submit with the answer paper a clear statement of any assumptions made if doubt exists as to the interpretation of any question that requires a written answer.

** Please provide only your student number and not your name on all answer booklets.

Section A (50 percent): Discuss the validity of FIVE (5) of the following statements. In your answer define or explain as precisely as possible any terms or concepts which are underlined. The text for each answer should be no longer than a page, but you also should also include diagrams or examples where appropriate. All questions have equal value.

A1. Privatization of land rights is an appropriate response to the so-called "tragedy of the commons" problem.

A2. Redistributive land reform in LDCs is doomed to failure.

A3. Credit rationing by formal sector banks in the rural sector of LDCs can be viewed as a response to the consequences of limited liability and asymmetric information in lending.

A4. Group lending and peer monitoring schemes are ways of reducing the transactions costs associated with uncollateralized lending.

A5. When rural labour markets function according to the nutritional efficiency wage model, increased demand for agricultural labour may have little impact on the earnings of individual workers.

A6. According to the Harris-Todaro model, internal migration restrictions like those imposed by the Chinese government are likely to promote both efficiency and wage equality.

A7. While export promotion policies may create welfare-reducing distortions to trade in the short term, they are justified because they generate growth in the long term.

A8. The adjustment lending strategy followed by the IMF and the World Bank during the 1980s and 1990s failed to induce growth in some LDCs because their governments were able to "pretend to adjust" in order to receive loans.

Section B (50 percent): Answer TWO (2) of the following **Long Questions**. They are of equal value.

B1. In a given year, Aleem receives 100 loan applications for 200 Nairu each. He spends a total of 2 working days and 10 Nairu obtaining information about an applicant for each loan. He expects to lend to 50% of those farmers who apply for a loan. Aleem also runs a store where he can earn 20 Nairu per day when open. He incurs 8000 Nairu per year in overheads. Aleem obtains funds at a cost of 10% and faces no bad debt or late repayment problems.

(a) What is the expected cost to Aleem of making an additional loan, as a percentage of the loan size ?

(b) Calculate the average cost of administering a loan as a percentage of the loan size ? Assume that the working year consists of 320 days.

Assume that Aleem's marginal costs do not vary with the amount he lends. The demand for loans from Aleem depends negatively on the interest rate that he charges and positively on the interest rates charged by other moneylenders.

(c) What interest rate should Aleem optimally be charging if the credit market is in a long-run monopolistically competitive equilibrium with free entry ? Explain with the aid of a diagram.

(d) What are the implications of market segmentation and localized monopolistic competition for government attempts to lend directly at low interest rates to borrowers in the rural sector ?

(e) An alternative policy is to offer low-interest lending to money-lenders, such as Aleem, so as to lower their costs of funds. Explain why this may not result in low interest rates loans to the borrowers.

B2. Suppose that the wage in a rural market for casual labour fluctuates between \$100 and \$200, each with probability $1/2$. Suppose that a risk-averse worker dislikes fluctuations in income and wants to smooth out these wages over time. He therefore approaches a large employer, who is risk-neutral. They agree on a permanent contract (w_1, w_2) , where w_1 is paid by the employer to the employee when the market wage is \$100, and where w_2 is paid when the market wage is \$200.

(a) What condition would the possible wage pairs (w_1, w_2) have to satisfy in order for the employer be willing to pay using such a contract rather than pay market wages? Explain.

(b) If the employer and the employee agree on a contract, explain why it must also be the case that $w_1 > 100$ and $w_2 < 200$.

(c) Now consider an ongoing form of this contract between employer and labourer. Why might it be difficult for the employer to enforce this contract? What is the labourer's potential short-run gain from violating it?

(d) What might be the long-run loss to the labourer for breaking the contract? Under what conditions would you expect the employer to be unwilling to enter into a permanent contract in the first place?

(e) What is an "intermediate society"? Explain why rapid growth in some sectors of such an economy could have negative consequences for labour markets in more traditional sectors?

B3. Imagine there are only two countries that make up the world economy: North (N) and South (S). In this simple world, only two commodities are produced: computers and rice. Both N and S are capable of producing both commodities and, to begin with, assume that the only factor of production is labour. Each country has 400 units of labour. Assume that producers are competitive and that labour is perfectly mobile between production sectors. The following table describes how many units of labor are required to make one computer and one sack of rice:

Labour Required	One Computer	One sack of rice
in N	10	5
in S	20	5

(a) If country N were in autarky and both goods were produced and consumed, what would the price of computers be relative to rice have to be ? Explain.

(b) If country S were in autarky and both goods were produced an consumed, what would the price of computers be relative to rice have to be ? Explain.

(c) If *both* goods are consumed once the economies are opened to trade, within what range must the international relative price of computers to rice lie ? Why are both countries better off in this example? What happens to the wages in each country?

Now suppose we replace the assumptions above with those of the Heckscher–Ohlin model. Both goods are produced using skilled and unskilled labour, but computer production is more skill-intensive than rice production. Assume now that the two countries are identical except for the fact that North has more skilled labour than South.

(d) Explain, with the aid of diagrams, why this model predicts that the autarky relative price of computers is higher in the South than in the North?

(e) When, under these assumptions, the countries open up to international trade, which factor would be predicted to gain and which factor to lose in the South? Carefully explain your reasoning.