Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Economics of Development

Spring 2013 Exam 1

Total quiz is 30 points. Each question is worth three points. Each sub question is worth an equal share of these three points.

1. Circle to indicate whether the statement is true or false.

|  |  |
| --- | --- |
| **Statement** | **Is the statement True or False?** |
| The Harrod Domar model predicts increasing the savings rate will increase the growth rate of an economy. | True or False |
| Sen states that one of the main themes of the first generation of development economics was identifying what policies will lead to higher Total Factor Productivity growth. | True or False |
| Neutral technological progress leaves unchanged the marginal rate of technical substitution for a given input bundle, but changes the amount of output produced using that input bundle. | True or False |
| According to the theory of comparative advantage, every country has to have a comparative advantage in the production of at least one commodity. | True or False |
| The ‘Prebisch-Singer’ hypothesis is based on the argument that the income elasticity of demand for manufactured goods is lower than the income elasticity of demand for primary products. | True or False |
| Dumping is when a firm that has monopoly power in a home country sells uses the monopoly profits to sell at a lower price in foreign markets to drive out competitors. | True or False |
| The United States is the largest provider of ODA compared to any other member of the OECD in terms of the total amount provided by a country. | True or False |
| Bilateral military aid is included in the OECD’s calculation of the value of ODA. | True or False |

1. Growth theories.
	1. Using the notation on this graph, use the space below the graph to describe the contrast Solow drew between growth from technological progress and growth from increased savings. In the graph, k is capital per worker on the x axis, output per worker is defined as $y=∝k^{β}$ on the y axis with α capturing technological knowledge and β the share of national income controlled by owners of capital, n is population growth rate, δ is the depreciation rate, and s is the savings rate.

a) Growth from technological progress is represented on this graph in what way?

b) Growth from a higher savings rate is represented on this graph in what way?

c) In class we discussed why the creators of the Harrod Domar model created this model. We then discussed why the Solow model was created. Finally, we discussed how the Solow model led to the literature on (unconditional) convergence. Summarize these discussions, indicating how Harrod Domar, Solow, and the convergence literature are intellectually related.

1. Exchange rates and development strategy.
	1. Illustrate on a supply and demand graph the impact of an overvalued domestic currency on the demand for US dollars where the price is units of domestic currency per dollar, and the supply and demand curves are of US dollars.
	2. Explain how an overvalued currency has been used to support and import substitution industrialization strategy.
2. More models.
	1. Identify the model associated with this figure and define F, L, N and W.



Model name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

F\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

L\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

W\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. In the figure above, coordination is needed across the N sectors if modernization is to occur in all N sectors of the economy. Why?
	2. Draw on the figure above a cost curve and label it W’ where coordination is not necessary for modernization to occur and explain below why this is the case in contrast to your answer to (b).
1. Below are a set of statements describing development strategies. Identify by putting a check in the box whether a given statement is part of Williamson’s “Washington Consensus”, the World Bank’s “Poverty Reduction Strategy”, or neither of these.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Williamson’s Washington Consensus | World Bank’s Poverty Reduction Strategy | Neither of these. |
| The strategy is partnership oriented – coordinating participation of bilateral, multilateral, NGO, government, and civil society institutions.  |  |  |  |
| The strategy includes tax reform that broadens the tax burden but lowers the taxation rates.  |  |  |  |
| The strategy identifies integrated rural development as a means to realize the millennium development goals  |  |  |  |
| The strategy liberalizes foreign direct investment flows  |  |  |  |
| The strategy promotes transformational development in reasonably stable developing countries.  |  |  |  |
| The strategy involves fiscal discipline, balanced budgets, and control over inflation. |  |  |  |
| The strategy is country driven and participatory.  |  |  |  |
| The strategy redirects public expenditure to fields with high economic return and the potential to improve income distribution  |  |  |  |
| The strategy is comprehensive and results-oriented, and focuses on outcomes that will benefit the poor.  |  |  |  |
| The strategy addresses global transnational concerns such as climate change and disease transmission.  |  |  |  |

1. New Growth Theory.
	1. What are forward and backward linkages, and how can they explain why 2% of the US land area produces 50% of GDP?
	2. What are spillovers, and what role do they play in the Romer model?
	3. New Growth Theory is sometimes called Endogenous growth theory. What does Endogenous growth theory endogenize?
2. O-Ring Theory.
	1. What is positive assortive matching and what role does it play in the O-ring theory?
	2. Is the O-Ring theory a model to explain convergence or divergence? Why?
	3.  in the O-Ring model. What is the spillover benefit to worker j of worker i spending her own money (worker i’s money) to improve worker i’s quality if workers are paid the value of their marginal product?
3. Illustrate the following:
	1. Place a tariff on the imported commodity such that the selling price with the tariff is higher than the international price but less than the domestic price if no imports are allowed. Show the level of domestic supply, the level of international supply, and the tax revenue generated. Y axis is price, x axis is quantity.

* 1. Such a tariff is proposed as a way to develop a domestic manufacturing industry that will become more efficient as the domestic industry ‘learns by doing’. What would ‘learning by doing’ look like on your graph to (a) – what part of the graph would change over time? You can verbally describe the change or draw the change.
	2. Explain how the promise by government to remove the tariff after 10 years and the industry has improved efficiency in the sense of your answer to (b) potentially illustrates “the commitment problem”.
1. Republic of Baobabs (ROB) workers can produce 5 units of cowpea and 10 units of fresh fish per unit of labor. Neighboring Commonwealth of Dunescapes (COD) workers can produce 10 units of cowpea and12 units of fresh fish per unit of labor.
	1. If there are 100 laborers in ROB and 100 in COD, describe the level of production of each commodity in each country in autarky if each country divides up their labor force with half of the work force allocated to each commodity.

|  |  |  |
| --- | --- | --- |
|  | Cowpea | Fresh Fish |
| ROB |  |  |
| COD |  |  |
| TOTAL |  |  |

1. Identify the product in which each country has a comparative advantage and explain why this is the product in which they have a comparative advantage.
2. Move 20 ROB workers to the commodity in which they have comparative advantage and 12 COD workers to the commodity in which they have comparative advantage. What levels of each commodity are now produced in each country?

|  |  |  |
| --- | --- | --- |
|  | Cowpea | Fresh Fish |
| ROB |  |  |
| COD |  |  |
| TOTAL |  |  |

1. Trade 105 units of cowpeas for 160 units of fresh fish. How does the amount of each commodity in each country now compare to what you found in (b)? Why did this happen?

|  |  |  |
| --- | --- | --- |
|  | Cowpea | Fresh Fish |
| ROB |  |  |
| COD |  |  |
| TOTAL |  |  |

1. Consider the following set of figures taken from the textbook and answer the questions below.



1. What is the name of this model and what qualitative / structural change in the economy of a country is this model designed to describe?
2. Where specifically does the money come from to invest such that the capital stock increases from KM1 to KM2? Shade in the area and describe why this area is profit.

Work Page