Name:_____ Economics of Development
Spring 2005 Practice Quiz 1

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

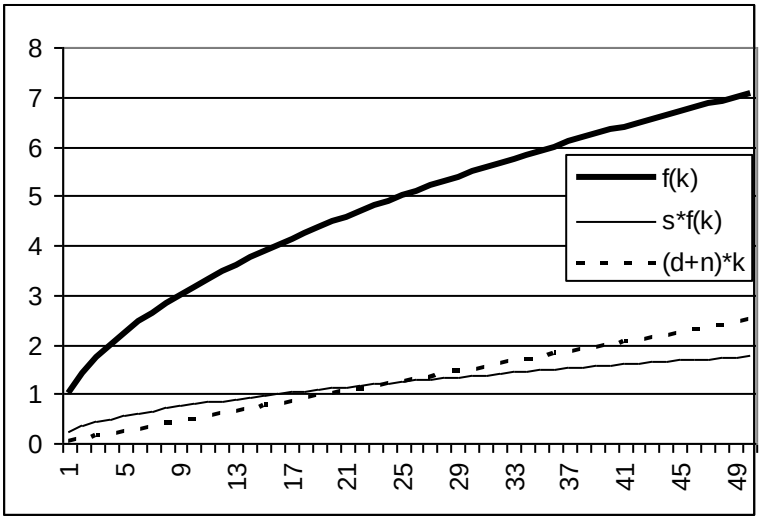
| **Statement** | **Is the statement True or False?** |
|---|---|
| The theory of positive assortive matching (as in the O ring theory) implies that market incentives will lead to training of lower skilled workers before higher skilled workers. | True or False |
| The Lewis model is designed to explain the process by which an economy changes structurally from a rural agricultural base to incorporate an urban manufacturing sector. | True or False |
| The Big-Push model assumes constant returns to scale in the traditional technology and increasing returns to scale in the modern technology. | True or False |
| Romer's endogenous growth theory model is based on the idea of positive spillovers in the economy based on the level of the economy wide capital stock. | True or False |
| Price elasticities of demand for primary commodities tend to be more elastic than those for manufactured commodities. | True or False |
| On average, developed countries have a lower share of GNP accounted for by the value of exports than do developing countries. | True or False |
| An overvalued exchange rate makes the price of exported goods higher than they would be if the exchange rate was determined by market forces. | True or False |
| A free trade area has free trade among member states, common external tariffs against non member states, and free movement of labor and capital among member states. | True or False |

2) Technological progress.
    a. Illustrate on an isoquant the impact of (Hicks) neutral technological progress.

    b. Contrast the treatment given to technological progress in exogenous growth theory with that in endogenous growth theory.

3) Growth theories.

a. This is the graph of the equilibrium in the Solow model. Does an increase in the savings rate lead to temporary or permanent growth in income per capita? (the y axis is output per worker and the x axis is capital per worker). Illustrate on this graph and explain your answer.




b. You are given the following equation: $\frac{\Delta Y}{Y} = \frac{s}{k}$. Identify the model from which this equation is drawn, explain what this equation means, and contrast the implication for an increase in s on growth according to this equation with that of the Solow model above.

3) East produces 5 hats per worker, and 2 cans of beans per worker. West produces 4 hats per worker and 1 can of beans per worker.

a) If there are 100 laborers in East and West respectively, describe the level of production of each commodity in each country in autarky if they divide up their labor force with 50 workers allocated to each commodity.

| | Hats | Cans of Beans |
|---|---|---|
| East | | |
| West | | |

b) Identify the commodity for which each country has a comparative advantage.

c) Contrast the idea of an absolute advantage with comparative advantage using this example.

4) Sen identifies four themes in the first generation of development economics.
    a. Identify three out of the four.

    b. Sen interpret the empirical evidence on the development process as it relates to these themes. Does he do this to argue that income growth generated according to these four themes is the primary goal of development economics? Explain your answer.

5) Given the following matrix based on the merchant guild example, answer the following questions.

| | | RULER | |
|---|---|---|---|
| | | Security | No security |
| TRADER | Bring Goods | ½ ¼ | -1 1 |
| | Don't Bring Goods | 0 - ¼ | 0 0 |

a) Describe the best response strategies in this game and identify the Nash equilibrium outcome.

b) Describe how this model illustrates how a failure to coordinate actions leads to a sub-optimal outcome.

c) In the context of the development of trade, describe how this model illustrates the commitment problem.

6) Kuznets described 6 common characteristics of the growth process of modern developed nations.
    a. Identify three of these.

    b. In the book and in class, we discussed 8 reasons why this historical record may be of limited value to the prospects of growth for developing countries today. Identify four of these.

    c. Are the eight reasons given for the limited value of the historical record noted in (b) the underlying conceptual basis for the distinction between underdeveloped and undeveloped nations in the dependence model?

7) Match the model / theory to the assumption.

| Model | | Write the number of the model | Assumption |
|---|---|---|---|
| 1) Lewis Model | | | Strong complementarity and specialization in division of labor |
| 2) Romer Model | | | Labor is allocated equally across N sectors in the economy. |
| 3) Big-Push Model | | | Increasing returns to scale are due to capital stock spillovers |
| 4) Solow Model | | | Technological progress occurs at a constant, exogenously determined rate. |
| 5) Stages of Growth Theory | | | The capital output ratio is a fixed constant. |
| 6) Harrod Domar | | | Given temporary protection, cost curves will fall over time as firms learn by doing. |
| 7) Infant Industry | | | Surplus labor exists in the agricultural sector that can be absorbed into the manufacturing sector. |
| 8) O-Ring Model | | | During the takeoff stage, net investment increases to over 10%. |

8) Illustrate on a supply and demand graph the following:
    a. The impact of an overvalued domestic currency in terms of the supply and demand for foreign exchange. (Price is in units of domestic currency to get one unit of the foreign currency, quantity is the quantity of foreign currency)

    b. The impact of a tariff on an imported manufactured good undertaken as part of an import substitution industrialization strategy.

9) Balance of Payments.
    a. Did developing countries during the 1960's tend to have positive or negative current account balances?

    b. Identify two impacts on developing countries of the tight monetary policy adopted by the United States in the early 1980s in regards to the origin of the debt crisis.

    c. Is the trade balance another name for the current account balance? Why or why not?

10) Define:

a. The Human Development Index.

b. The World Bank standards to define a country as a developing country (categories are enough – you don't need to note the cutoffs in dollar terms).

c. An "inward looking" trade policy.

d. The commodity terms of trade.