

Final.
Name: _____

Spring 2008
Economics of Development

Each question is worth the total number of points in parentheses; sub-questions are allocated an equal share of the total points per question. Final is worth 30 points.

1) Inequality. (3 points)

a) Draw a Lorenz curve for the distribution of income in a country. Be sure to label the axes.

b) Draw another Lorenz curve that has a more unequal distribution than the one in (a).

c) Describe how to compute the Gini coefficient for each of these two Lorenz curves, and argue whether the coefficient in (b) will be greater than (a) or vice versa.

2) True or False (4 points)

Statement	Circle whether the statement is true or false	
The majority of people in the developing world live in rural areas.	True	False
The majority of people in the developing world's labor force are employed in agriculture.	True	False
The majority of GNP in the developing world comes from the agricultural sector.	True	False
Psacharopoulos reported the private internal rate of return to primary education in sub-Saharan Africa was lower than a standard discount rate of 10%.	True	False
The world population growth rate has slowed since reaching a peak in 1960-1980.	True	False
A country becomes eligible for Millennium Challenge Act assistance based on its composite score for: Voting with the US in the UN general assembly; Participation in the Coalition of the Willing in Iraq; and low aggregate tariff rates for goods and services imported from the United States.	True	False
The United States allocates over 2% of GNP to overseas development assistance.	True	False
The Poverty Reduction Strategy adopted by the World Bank is intended to coordinate participation of bilateral, multilateral, NGO, Government, and civil society activities.	True	False
The informal sector is the unorganized, unregulated, unregistered sector of the economy.	True	False
Urban giantism describes the phenomena that the largest city in developing countries tends to hold the largest share of the national population who suffer from overnutrition.	True	False
The evidence from the WHO presented in class reported that malnutrition is a contributing factor to over half the deaths of children under five in developing countries.	True	False
The upper arm circumference of adults does not change much from age 10-65, making it a good measure of current adult undernutrition.	True	False

3) Population issues (3 points)

a) Fill in the following table. Fr stands for the total fertility rate of the associated age cohort during their reproductive years. Assume future youth cohorts will have a total fertility rate of 2. Total population is for males and females; assume 50% of the population is female. The number in each cell of the table in rows a,b, and c should describe the number of females in each cohort in a given generation.

Country A

	Generation 1	Generation 2	Generation 3	Generation 4
a.Pre-reproductive cohort, Fr=2				
b. Reproductive cohort , Fr=2				
c.Post reproductive cohort, Fr=2	20			
<i>Female Population</i>	60			
<i>Total population</i>	120			

Country B

	Generation 1	Generation 2	Generation 3	Generation 4
a.Pre-reproductive cohort, Fr=2				
b.Reproductive cohort , Fr=3				
c.Post reproductive cohort, Fr=4	10			
<i>Female Population</i>	60			
<i>Total population</i>	120			

Describe how your findings on total population by the fourth generation illustrate the concept of **the hidden momentum of population growth**.

4) Poverty measures. (3 points)

Person number	Income per day
1	\$0.15
2	\$0.75
3	\$0.90
4	\$0.95
5	\$2.50
6	\$2.55
7	\$2.75
8	\$3.55
9	\$4.45
10	\$13.45

TOTAL INCOME \$32.00

a) What is the total poverty gap, the average poverty gap, the average income shortfall, and the normalized average income shortfall if the poverty line is defined as \$1 per person per day?

TPG=

APG=

AIS=

NAIS=

b) If we take \$0.10 from person 5 and give it to person 4, does this reduce the headcount index and if so by how much?

If we take \$0.10 from person 4 and give it to person 3, does this reduce the headcount index and if so by how much?

c) What share of total income is held by the highest quintile and what share is held by the lowest quintile?

Highest=

Lowest=

5) Debating points (3 points)

a) Provide two arguments why asking a developing country to immediately ban child labor is potentially counterproductive if our goal is to improve the well being of child laborers in that developing country.

b) Provide two arguments why the existence of an informal sector is beneficial to a developing country.

c. Provide two arguments why educating girls in developing countries is an important part of an overall development strategy.

6) Health (3 points).

a) match

A	Write number of A that matches B here	B
1. Biochemical Assessment		Measure of past undernutrition
2. Dietary assessment		Blood test to detect anemia
3. Clinical Assessment		Measure to detect wasting
4. Weight for Age		Visually detect physical symptoms of malnutrition
5. Height for age		Look at food intake to identify gaps in the diet
6. Secondary malnutrition		Unable to absorb nutrients in food

b) Explain the idea behind a disability adjusted life year.

c) Explain how health sector priorities identified by a DALY measure may differ from priorities identified by a mortality measure.

7) Education (3 points)

	Circle whether the statement is true or false	
The 'missing women mystery' investigates why there are so few females in tertiary education compared to primary education in developing countries.	True	False
In general, as the average years of education in a developing country goes up, the education Gini goes down.	True	False
The "educational Kuznets curve" describes how educational quality first decreases as primary enrollment increases before increasing after reaching a critical threshold.	True	False
The primary school enrollment ratio has declined from 1970 to now in Sub Saharan Africa due to population growing more rapidly that spaces in classrooms have been provided.	True	False
Achieving universal primary education is one of the Millennium Development Goals.	True	False
A country's educational attainment is included as a component of the Human Development index for that country.	True	False

8) Agriculture. (3 points)

a) Describe the three main types of agrarian systems found in the developing world and note in which geographic region each one is most commonly found.

b) Chose one of these agrarian systems. Provide two reasons why a land reform program might contribute to improved productivity in this agrarian system.

9) Environment and Development. (3 points)

- a) Describe the measure of “green net national product (NNP*)” presented in class and why one might want to use this instead of GNP to assess the value of all goods and services produced by an economy in a given year.

b) Match the literature to the statement

A (Literature)	Write number of A that matches B here	B (Statement)
1. Common Property Management		The present value optimal outcome of growth models that incorporate environmental stocks as a form of capital are ‘grim for far-distant generations’.
2. Environmental Kuznets curve		As each user only takes into account the private costs associated with their decision rather than the full costs to all users, each individual acting in their own self interest leads us to a sub-optimal outcome in terms of total social welfare.
3. Sustainable development		Environmental harm will first increase as income per capita increases before reaching a threshold, after which the environmental harm will begin to be reversed.
4. Environment and Vulnerability.		Technology improvement in agriculture can be ‘land sparing’ and poverty reducing.
5. Poverty-environment nexus.		The true savings rate in a country after accounting for investments in human capital, depreciation of produced assets, and the depletion and degradation of the environment.
6. Adjusted net savings		Economic development can suffer setbacks from environmentally driven asset shocks.

10) Poverty (2 points)

a) In what ways would a development policy designed to reduce poverty need to approach households in chronic-structural poverty differently from those in transitory-stochastic poverty?

b) Krishna's paper presented the evidence in the table below concerning poverty dynamics. Pick **either** those who moved out of poverty (the 11% group) or those who moved into poverty (the 8% group) and describe his main findings as to the main causes people described for the movement of people in this group.

	Poor 25 years ago	Not poor 25 years ago
Poor now	18%	8%
Not poor now	11%	63%

Extra Credit (get them all, get 1 bonus point).

Fun with Acronyms: Write out what the acronym stands for

HIPC	
DFID	
CGIAR	
LICUS	
PRGF	