

**St. Lawrence University**

*Second Midterm Exam– November 2021*

**Economic Development**

**ECON 336**

**Full Name:**

**Student ID:**

*Writing Time: 90 Minutes*

*Permitted Materials: Non-programmable Calculators*

**Instructions:** Do not begin the exam yet. The professor will announce the beginning of the exam when he makes sure that everyone has a copy of the exam. In the mean time, go ahead and put your full name and ID number on the space provided. You should feel free to make use of the reference sheet throughout the exam.

## Reference Sheet

- $P_\alpha = \frac{1}{N} \sum_{i=1}^H \left(\frac{Y_p - Y_i}{Y_p}\right)^\alpha$
- $TPG = \sum_{i=1}^H (Y_p - Y_i)$
- $HeadcountRatio = \frac{H}{N}$

**Part A: Multiple-choice Questions (30 points)**

1. Distribution of income according to percentiles, such as the highest 40% or lowest 20% is known as the ..... distribution of income.
  - A. size
  - B. functional
  - C. GNP-weighted
  - D. equal-weighted
2. The Gini coefficient provides a measure of
  - A. the level of poverty.
  - B. the level of relative inequality.
  - C. disguised unemployment.
  - D. the rate of growth.
3. Kuznets' inverted-U hypothesis
  - A. implies that things must get worse before they get better.
  - B. suggests that inequality will worsen and then improve as a country grows.
  - C. suggests that inequality will improve and then worsen as a country grows.
  - D. points out six characteristics of modern economic growth.
4. With modern sector enrichment growth, inequality will
  - A. first rise and then fall.
  - B. first fall and then rise.
  - C. remain about the same.
  - D. none of the above.
5. Which of the following policies might increase labor intensity in industry?
  - A. a decline in the cost of credit
  - B. a decline in the minimum wage rate
  - C. a decline in the elasticity of substitution
  - D. all of the above.
6. Brazil's growth rate during the 1960's was 6.0% when poverty weights were used to evaluate growth, compared with 8.2% when GNP weights were used to evaluate growth. One can conclude from these numbers that
  - A. average income growth was greater for poor households than for rich households.
  - B. average income growth was greater for rich households than for poor households.
  - C. more and more households were falling below the poverty line.
  - D. the size distribution of income was getting worse.
7. Developing countries who have adopted capital-intensive technologies tend to have
  - A. relatively higher Gini coefficients.
  - B. relatively lower Gini coefficients.
  - C. Gini coefficients equal to one.
  - D. Gini coefficients equal to zero.

8. The hidden momentum of population growth is caused by
- A. the demographic transition.
  - B. population age structure.
  - C. the opportunity cost of a woman's time.
  - D. children's contribution to income.
9. The Malthusian population trap assumes that
- A. contraception is unavailable.
  - B. technological progress may be rapid.
  - C. fertility increases with per capita income.
  - D. all of the above.
10. Which of the following will cause the largest reduction in the birthrate?
- A. the population becomes less religious
  - B. public healthcare improves
  - C. education becomes more available
  - D. an increase in the opportunity cost of a woman's time
11. Which of the following is a direct implication of the view that childbearing is an economic decision?
- A. People will not have additional children unless they can earn a profit from doing so.
  - B. Social factors have no effect on childbearing decisions.
  - C. Compulsory education will increase fertility because educated children have the potential to earn higher salaries.
  - D. Fertility should fall with improved opportunities for women to work in jobs outside the home.
12. An argument supporting promotion of the urban informal sector is
- A. the formal sector is incapable of providing enough employment.
  - B. informal sector workers are poorly educated.
  - C. it uses a relatively high capital intensity.
  - D. it would reduce urban bias.
13. Which of the following is not among the causes of Urban Giantism?
- A. Import substitution industrialization
  - B. Rent-seeking behavior of firms
  - C. Autocratic regime
  - D. Rapid population growth in megacities
14. The functional distribution of income refers to the distribution of income between
- A. individuals or households.
  - B. rural individuals or households.
  - C. urban individuals or households.
  - D. the factors of production (land, labor and capital).

15. In what region income inequality is greater?

- A. Latin America and Middle East
- B. Sun-Saharan Africa
- C. North America
- D. East Asia and Oceania

**Part B: Numerical and Essay Questions (70 points)**

Answer **all** questions in this section using the space provided. Answers are expected to be succinct but complete. Answers that are too long and irrelevant will be penalized.

**Question 1** Answer all parts.

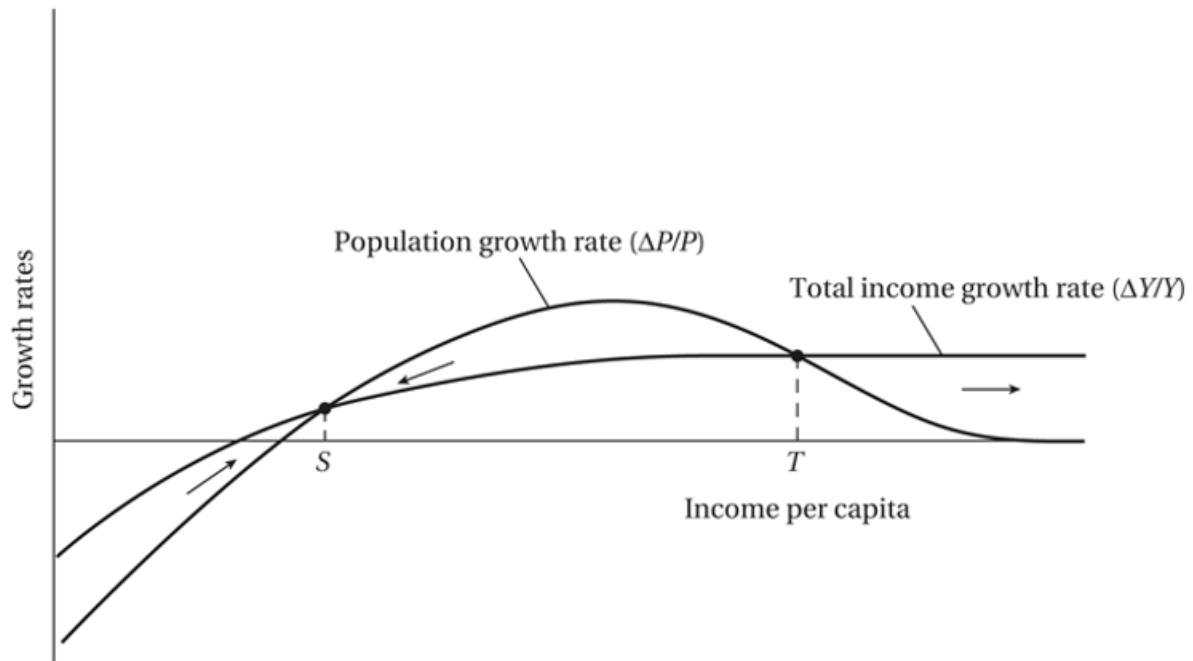
1. [ 4 points ] Briefly explain why the headcount ratio is not a good measure of poverty. What do you suggest instead?
2. [ 3 points ] What are the three ways to limit human environmental impact? You do not need to explain, just name them.
3. [ 4 points ] Briefly explain why policies designed to reduce urban unemployment may not greatly reduce poverty in developing countries.
4. [ 4 points ] Briefly explain the missing women phenomenon. Discuss one factor leading to this phenomenon.

**Question 2** Iranio is a small, low-income economy where the people are divided into four income groups. The following table shows the number of people in each group, and how much the people in each group earn. The poverty line is set at \$700. According to table, the poverty head count ratio, the total poverty gap, and the Foster-Greer-Thorbecke (FGT) index for this country are 37.5%, \$9000, and 0.16, respectively. Suppose that the government has a total budget of \$2000 to use for poverty reduction, which it will use in the form of income transfers to poor people.

	Number of people in the group	Income of each person in the group
A	20	\$300
B	10	\$600
C	20	\$1200
D	30	\$2000

- [ 6 points ] What is the new head count ratio if the government uses its budget to give equal size transfers to all the people in Group A? What is the new total poverty gap and Foster-Greer-Thorbecke (FGT) index?
- [ 6 points ] What is the new head count ratio if the government uses its budget to give equal size transfers to all the people in Group B? What is the new total poverty gap and Foster-Greer-Thorbecke (FGT) index?
- [ 3 points ] What policy has the biggest impact on the head count ratio? Why?
- [ 3 points ] What policy has biggest impact on the depth and severity of poverty? Why?

**Question 3** Consider the following graph.



1. [ 6 points ] Determine the Malthusian Population Trap on the graph. Briefly explain why it is a stable equilibrium.
2. [ 6 points ] There are two main arguments against the Malthusian Population Trap theory. One of them is *failing to take into account the technological progress*. Show the effects of the technological progress on the graph. Also, name the other one.



**Question 4** Consider the microeconomic theory of fertility.

1. [ 8 points ] How does the demand for children changes if there is a simultaneous **decrease** in household income and net child price as a result of, say, limiting female employment opportunities and a rise in wages, coupled with a tax on children beyond a certain number per family? Show that graphically.

**Question 5** Consider the urban giantism problem in developing countries.

1. [ 8 points ] Name three of the causes of urban giantism in developing countries. Explain two of them.

**Question 6** Consider the Harris-Todaro Migration Model.

1. [ 3 points ] What is the main factor affecting people's decision to migrate?
2. [ 6 points ] The following information are given. Will there be migration?
  - Rural wage = \$1.50 per day
  - Urban modern wage = \$2.5 per day
  - Urban traditional income = \$0.5 per day
  - The probability of getting a modern job is 0.5.

——— *End of Examination* ——