Final Exam

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 240 points (to be scaled down to 150 points) and is scheduled to take 120 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 14-point question should take 7 minutes.

- 1) (14 points) Answer ONE of the three parts.
- A) Some debt crises are caused by imprudent bank lending to the government. Why would banks loan too much to a government?
- B) Some debt crises are caused by international economic shocks. Explain how that can cause a debt crisis?
- C) The book says that a NPV debt/exports of 100% to 300% or higher is a problem. Why is that a problem? Is that an internal transfer problem, external transfer problem, or a debt service problem? Explain your logic.

2) (14 points) Answer EITHER Part A OR Part B.

- A) One of the book's "characteristics of rapidly growing economies" is "effective governance and institutions". What does that mean? Why is that important for economic growth?
- B) The Washington Consensus said that one of the things that governments should do to help them develop is to "do privatization". What does that mean and why is that important?

3) (16 points) Answer EITHER Part A OR Part B.

- A) GNI per capita using PPP has several problems which make it less useful in developing countries. What are two of these problems? Explain why each of them are problems.
- B) One of the Millennium Development goals is to "Achieve, by 2015, universal access to reproductive health." Give two reasons why that is important and explain them.

4) (16 points) Answer EITHER Part A OR Part B.

- A) What is *population momentum*? Explain why it happens.
- B) What are *backward linkages* of a proposed factory? When we consider the return on a project like a factory, do we normally include backward linkages?

5) (16 points) Answer ONE of the three parts.

- A) Burundi is a small, landlocked, country near the center of Africa, which I assume you know nothing about. The World Bank says it is the poorest country in the world. There are three schools of thought as to whether official development aid (ODA) will help the country or not. Why might Burundi be an example where ODA will help it? Explain your logic based just upon the information given and any educated guess you can make based upon that information.
- B) According to Wikipedia, South Sudan's bank interest rate was 15% in 2023, and the average inflation rate over the past five years was 78%. <u>Just from that information</u>, what do you think is happening to their financial system? Explain your logic.
- C) According to the IMF, Belarus and Romania have exchange rates with crawling bands. What does that mean? Why would they do that?

6) (16 points) Answer EITHER Part A OR Part B.

- A) What do you think is the single most important thing a poor country can do to improve their healthcare system? Explain how that would help.
- B) What do you think is the single most important thing a poor country can do to improve their education system? Explain how that would help.

7) (18 points) Answer EITHER Part A OR Part B.

- A) Adjusted net saving (ANS) takes saving and subtracts two things from it. What are these two things? Explain why we would want to subtract those two things.
- B) It is said that corruption hurts the economy. Explain why that is true. What can the government do about that? Explain how that would help reduce the problem.

- 8) (18 points) Answer EITHER Part A OR Part B.
- A) Draw the original Kuznets Curve (**not** the environmental one) and explain why it takes its shape.
- B) Draw what you would expect the population pyramid would look like for an extremely poor African country. Explain why it takes that shape.

9) (18 points) Answer EITHER Part A OR Part B.

- A) When determining what to tax, is it better to tax goods with an inelastic demand or an elastic demand? Explain your logic giving an example of each type of good and why a tax on that is good or bad.
- B) When determining what to tax, is it better to tax something which has a small tax base or a large tax base? Explain your logic giving an example of each type of base and why a tax on that is good or bad.

10) (22 points) Answer EITHER Part A OR Part B.

- A) Argentina's life expectancy at birth is 75.4 years, expected years of schooling is 17.9 years, mean years of schooling is 11.1, and the GNI per capita using PPP is \$20,925. Setup the equation which would calculate Argentina's HDI. **Do NOT do the calculation.** Explain how you would get the final value. If you feel something needs to be explained, explain what you are doing. (Source: the HDI Report 2023)
- B) Suppose the table below represents the income of the quintiles of a country. Draw the Lorenz Curve and estimate the Gini Coefficient. State how you got the numbers for your points on the graph and how you estimated the Gini Coefficient.

Quintile	1	2	3	4	5
% of income	5	10	15	20	

11) (22 points) Answer EITHER Part A OR Part B.

- A) Draw the Two-Sector Labor Supply/Demand diagram with a minimum wage. Illustrate the effects of an increase in the productivity of labor in the industry. Explain why the curve(s) moved as drawn. What happens to the wage rate in the two sectors, and the amount of labor in each sector. State how you see those on the graph.
- B) Why does the manufacturing sector pay the MPL? Why does the agriculture sector pay the APL in developing countries? Why does that cause the shadow price of labor to be less than the wage paid in manufacturing, even when there is no minimum wage? Explain your logic.

12) (24 points) Answer EITHER Part A OR Part B.

- A) Draw the MEC/MAC diagram with two companies which have different MAC curves. Use it to prove that the current method of regulating pollution is not the least costly way to get to the optimal point.
- B) Draw the MEC/MAC diagram with two companies which have different MAC curves. Use it to explain how cap-and-trade of permits can achieve the optimal point with the least costs.

13) (26 points) Answer EITHER Part A OR Part B.

- A) For this question, assume you are choosing between working after graduation or getting a master's degree and then working. Also, assume you are graduating at the end of this semester. Suppose that a master's degree costs \$30,000 a year and it takes two years to graduate. If you get the master's degree, you will then work for 46 more years. The salaries you would get are \$109,000 per year without a master's degree and \$128,000 per year with a master's degree:. Setup the calculation which could be used to determine the internal rate of return. Do not worry about doing the calculation. Explain why you put the numbers where you did and how you would use it to calculate the internal rate of return.
- B) Suppose a project takes two years to build. It costs \$2000 per year. After that, the project will make \$800/year for 10 years. Then the building could be sold for \$500. Suppose you want to get at least a 10% return. Setup the net present value calculation to determine whether the project would be worth doing. Briefly state why you put each number where you put it. Without doing the calculation, explain how you could determine whether or not the project is worth doing. Explain your logic.