Midterm Exam - Answer Key

EC 380 - International Economic Issues

Winter 2025

Give every question your best attempt.
Best of luck.
You got this!

Name: Written by Jose Rojas 95#: ____________

The maximum amount of points on this exam is 75 points. You have a total of 1h 20min (80 minutes) to complete the exam, unless otherwise noted. The only items allowed on your desk at any time are a pen and/or pencil, scratch paper, a 3x5 note card, and a calculator. Everything else must be stored in your bag underneath your desk. Any form of cheating will result on a zero on the exam.

There are three sections to be completed:

- **Multiple Choice:** 5 Questions
- **Short Answer Questions:** 2 Questions
- **Multi-Part Analysis Questions:** 1 Question (6 parts)

Point totals and question specific instructions are listed for each section. Please ask for clarification if a question is not clear to you.

The exam is a total of 7 pages. There are 5 pages of questions + 2 pages for scratch paper.
Please verify you have all 7 in your exam. If you do not, let me know immediately.

Multiple Choice - 25 Points

Circle or "X" the answer you think most correctly answers the following questions. If you mark a choice and would like to change it, **clearly indicate which one is your correct answer**.

1. [5 points] A country will only export a good, if and only if, the **World Price** is relatively:
   - A. Equal to the domestic price
   - B. Lower than the domestic price
   - ***C. Greater than the domestic price***
   - D. It does not matter, they export the good they have a comparative advantage in
2. [5 points] In the Ricardian Model we have assumed that the **PPF is a straight line because the trade-off between either good does not change**. What assumption of the model allows us to do so?
   - A. Both factors are necessary in production
   - B. Labor and Capital are substitutes
   - ***C. Labor is homogeneous and of equal skill***
   - D. Labor is immobile across borders
3. [5 points] One key difference between **tariffs and quotas** is that:
   - A. Tariffs affect price, while quotas do not
   - ***B. The government collects revenue in tariffs, but not with quotas***
   - C. Tariffs are considered an interference on the free market, quotas are not
   - D. Quotas only restrict quantity demanded, while tariffs only restrict quantity supplied
4. [5 points] Which of the following trade models **best aligns** with the sentence: "Distance between two countries and the size of individual economies are predictive of existing trade flows"
   - A. Ricardian Model
   - B. Distance Model
   - ***C. Gravity Model***
   - D. Hecksher-Ohlin Model
5. [5 points] There are two countries, Zirosto and Reyes, where there is **only one industry and wages are different across borders**. If workers are allowed to freely **migrate** between the two countries, what is the expected effect on wages?
   - A. Wages in both countries will remained unchanged
   - B. Wages inequality amongst both countries will increase as a result of migration
   - ***C. Wages will equalize across borders***
   - D. Not enough information to determine the effect on wages

Points earned: ____________ / 25 points

Short Answer - 20 Points

Answer the following questions to the best of your ability. For full credit, show all of your work and clearly indicate your final solution for each party by circling the answer.

6. [10 points] Consider a **Specifics Factor Model** setting. Suppose a country produces **airplanes** and **wheat** using **labor, capital, and land**. **Labor** is mobile between sectors. **Capital** is only used to produce **airplanes** and **Land** is only used to produce **wheat**. Assume the country is **capital-abundant**.

   Who benefits and who loses from trade in this setting? Explain your answer in terms of changes in factor returns. Address all input factors (Labor, Capital, and Land).

   Capital-abundant → Export airplanes

   Owners of Capital will see an increase in their returns (winners

   Owners of land will see a decrease in their returns (losers)

   Owners of labor will see ambiguous changes

   All these changes are due to price changes due to trade

7. [10 points] Consider a small open economy that imposes a **tariff** on an imported good. What is the overall impact of the **tariff** on **national welfare**? Identify the winners and losers. Discuss whether the country benefits from the **tariff policy** in terms of welfare.

   Relative to free-trade, we expect national welfare to decrease

   Winners of a tariff are domestic producers as they see Producer Welfare increase

   Losers are consumers as Consumer Surplus decreases

   The country does not benefit as welfare decreases overall due to inefficiencies

Multi-Part Analysis - 30 Points

Answer the following questions to the best of your ability. For full credit, show all of your work and clearly indicate your final solution for each party by circling the answer.

8. Consider two countries, Bribri and Chorotega. They have the following marginal productivity of labor structure.

	Coffee	Bananas
Bribri	3	2
Chorotega	1	4

The **Bribri** country has a labor force of 60. The **Chorotega** country has a labor force of 50.

Consider a setting under a Ricardian Model.

(a) [4 points] What are the **Opportunity Costs** of each good for the **Bribri** country?

$OC^{B}_{coffee} = 2/3$ $\quad OC^{B}_{bananas} = 3/2$

(b) [4 points] What are the **Autarky prices** of each good for the **Chorotega** country?

$P^{C}_{coffee} = 4$ $\quad P^{C}_{bananas} = 1/4$

(c) [6 points] What is the maximum production capacity **of each good** for **each country**?

Bribri

$L = 60$

$Coffee = 60 \cdot 3 = 180$

$Bananas = 60 \cdot 2 = 120$

Chorotega

$L = 50$

$Coffee = 50 \cdot 1 = 50$

$Bananas = 50 \cdot 4 = 200$

(d) [6 points] Assume that the **Bribri** country population likes to consume both goods in equal proportion. That is, in a 1-to-1 ratio. Under **Autarky**, how much should they produce of each good to satisfy consumer demand?

Let the x-axis good be coffee.

$\boxed{\text{PPF is: Bananas} = 120 - \tfrac{2}{3}\text{Coffee} \;\&\; \text{Preferences are Bananas} = \text{Coffee}}$

$\text{Bananas} = 120 - \tfrac{2}{3}\text{Bananas}$

$(1 + \tfrac{2}{3})\text{Bananas} = 120$

$\tfrac{5}{3}\text{Bananas} = 120$

$\boxed{\text{Bananas} = \frac{120 \cdot 3}{5} = 72}$

$\text{Coffee} = \text{Bananas}$

$\boxed{\text{Coffee} = 72}$

(e) [4 points] Under **Free Trade**, how much more coffee and bananas does the **Bribri** country produce than under **Autarky**?

Bribri makes 72 of each under Autarky

Under Free Trade, they make 180 Coffee & 0 Bananas

$\boxed{\text{So they make 108 more coffee \& 72 less Bananas}}$

(f) [6 points] If both countries trade with each other, what should the **World Price** of **Coffee** be? What should the **World Price** of **Bananas** be?

Good	World Price
Coffee	$2/3 < P_C^w < 4$
Bananas	$1/4 < P_B^w < 3/2$

Bonus Question

9. [5 points (bonus)] There's something that you spent time studying that wasn't asked on the exam. What is it and how does it work? **Explain it like you are teaching a class of 10 year olds**.

I want you to have fun here. Full freedom on how many points each answer deserves.

A main criteria is if you think a child would understand it.

Beyond that, its a matter of clarity & if it seems like they know what they are talking about.

Scratch Paper

Scratch Paper