Your name: _______________________________________________

Part I. Definitions (Select any 5 of the following 6; 4 points each for a total of 20 points)
Define the terms concisely but precisely.

1. Chronic and transitory poverty

2. Internal rate of return criterion for project appraisal

3. National Treatment Principle of the WTO

4. Comparative advantage
5. Global public goods

6. Tradable pollution permits

Part II. Short questions (Select any 4 of the following 5; 10 points each for a total of 40 points)
Give short answers

1. Targeting of anti-poverty programs
   If a Minister of Social Welfare does not have information about people’s incomes, and wants to use transfers of cash or goods to reduce poverty, what advice would you give this official to organize programs in such a way that the non-poor will not want or will not be able to participate? Give examples and explain why it would work.
2. Program impact
   Based on your knowledge of the experimental design put into place for the evaluation of the Progresa program:
   (1) Why would the comparison between the enrollment rates of eligible and non-eligible children not give you a good assessment of the program impact?
   (2) Explain briefly the double difference method used in this evaluation. What is the assumption made for the validity of the method?

3. Group lending
   (1) What are the basic rules of functioning of group-lending schemes?
   (2) How does group-lending solve the moral hazard problem?
4. Health risks

The risk that a member of a population will catch a water born disease from drinking the water of a river is:

\[
\text{Risk} = \text{Scale coefficient} \times \text{Aggregate sewage disposed in the lake} \times \text{Water consumption/weight.}
\]

The local Health Department lacks the capacity to tax polluters or restrict the amount of waste disposed in the lake by individuals. It is given a budget and is supposed to use it to minimize the risk to vulnerable populations.

1. Suggest policies that the health department should consider.
2. How should it allocate resources among these policies?

5. Technological change

Suggest two policies to induce the adoption of resource conserving technologies. What will be the likely impacts of adoption on the production level, pollution, and variable input use?
Part III. Essays (Select any 2 of the following 3; 20 points each for a total of 40 points)

1. Growth, inequality, and poverty
   (1) Explain why the impact that economic growth has on inequality is an important factor in conditioning the poverty reduction value of growth.
   (2) If there is a concern with the effect that growth may have on inequality, what policy options would you recommend to make growth more equitable?
   (3) If you want to reduce rural poverty, what are some desirable features that growth should have?

2. Macroeconomic consequences of the coffee bust

   The economy of Costa Rica can be succinctly summarized as follows:
   - 4 major exports: coffee, banana, tourism, and electronic products.
   - 3 major imports: oil, heavy industrial products, and equipment.
   - Food production and standard consumer goods being mostly non-tradable.

   The international price of coffee fell dramatically by 50% over the last year.

   (1) What is the effect of the fall in coffee price on the balance of trade?
   (2) What is the consequence on the real exchange rate? Explain how the adjustment of the real exchange rate induces a re-equilibrium of the balance of trade.
   (3) Which sectors of production are negatively affected? Which sectors benefit?
   (4) Suggest policies that the government could undertake to assist coffee producers if one anticipates that the price decline is only a short term problem. What policies should be put into place if, on the other hand, one anticipates that this is a permanent change due to entry of a major producer in the world market?

3. Pesticide policies
   (1) What are the merits and drawbacks of harmonizing pesticides policies internationally?
   (2) Who will be the likely gainers and losers of such a policy?