

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 100 points (to be scaled up to 160 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class. I will not grade what is written on this sheet.

1) (10 points) For EITHER the reason in Part A OR the reason in Part B define what the phrase means, then explain why it is an economic reason for a government. Give me economic reasons.

- A) Public goods
- B) Provide a legal system

2) (10 points) For EITHER the event in Part A OR the event in Part B. Determine what happens to GDP. Explain your logic mentioning which part of GDP changed and how much it changed.

- A) You buy a \$50 shirt from Jordan which the store paid the Jordanian manufacturer \$35 for.
- B) Bethany College renovates Richardson Hall for \$500,000.

3) (10 points) Answer EITHER Part A OR Part B.

- A) We calculated GDP, NDP, NI, PI, and then DPI. At which step did retained earnings appear? Is it subtracted or added? Why was it subtracted or added?
- B) All statistics have problems which make them less useful than we would like. GDP systematically underestimates the production of goods services in a developing country. Explain two reasons this is true.

4) (10 points) Answer EITHER Part A OR Part B.

- A) Suppose the CPI started out at 900 at the beginning of the year and ended the year at 918. What was the inflation rate? Show all work. If the expected inflation had been 4%, then what is one group who is helped by that inflation rate? Explain your logic.
- B) I mentioned two costs of high inflation which was accurately predicted. Briefly explain what they are.

5) (12 points) Answer EITHER Part A OR Part B.

- A) Suppose a country has 1000 people of working age. There are 450 employed people. There are 50 people who do not have a job, but are looking for a job. 200 people are retired. 230 are stay-at-home parents, and the remaining 70 would like a job, but have been unemployed for so long that they quit looking for a job. What are the labor force participation rate and the unemployment rate? Show all work and briefly explain how you chose which numbers to add.
- B) The current unemployment rate is currently at 5.0%. What should the unemployment rate be? Explain your logic by referring to two of the types of unemployment.

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

- A) Suppose a project would cost \$500. It would help one person \$600. However, it causes a negative externality which hurts 200 people \$2 each. Should the project be done? Would the market provide it? Would voting result in the project? Explain your answers to all parts.
- B) Draw the supply and demand for a good which creates a positive externality. Prove that the market will not provide the socially optimal quantity. Do not worry about solving the problem.

7) (16 points) Answer EITHER Part A OR Part B.

- A) What is the problem facing Social Security? What are the two causes of the problem which mean it will

get worse for the next decade? One proposal to reducing the problem is to means test the benefits paid. How would that reduce the problem? Would you use that as part of your solution to save Social Security? Explain your logic.

B) What is the problem facing Social Security? What are the two causes of the problem which mean it will get worse for the next decade? One proposal to reducing the problem is to raise the retirement age. How would that reduce the problem? Would you use that as part of your solution to save Social Security? Explain your logic.

8) (16 points) Answer EITHER Part A OR Part B.

A) Suppose the tax brackets are given to the right. If a person earns \$50,000.00, then what are that person's marginal tax rate, total taxes paid, and average tax rate? Show all work. If there is no work, then state how you reached your conclusion.

B) Draw the supply and demand for a good like textbooks which has a fairly steep demand curve and a relatively flat supply curve. Illustrate the effects of a tax on the graph. Explain why it moved as drawn. As drawn, who pays most of the tax? Explain how you reached that conclusion including referencing points on the graph.

Bracket	Rate
\$0 - \$10,000	10%
\$10,000 - \$20,000	20%
\$20,000 - \$100,000	30%
>\$100,000	40%