

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 10-point question should take 5 minutes. I cannot give extra time because some students have a class after your class.

1) (10 points) Answer EITHER Part A OR Part B.

A) Developing countries complain that much of their GDP is not counted. Explain why this is probably accurate using two examples.

B) Suppose you paid \$4000 for shares in a Japanese company. If you paid \$20 in commissions to a broker in your home town, then how much would GDP go up? If it is zero, then explain your logic. If it is not zero, then which part of GDP is it? Why did you choose that?

2) (10 points) Answer EITHER Part A OR Part B.

A) Suppose the working aged population is 200 million, the number of people working is 135 million, and the number of unemployed is 15 million. Calculate the labor force participation rate and the unemployment rate. Show all work and briefly explain what you did.

B) Suppose the unemployment rate is 8%. It is possible for the unemployment rate to drop to 7.9% but that drop could be a sign that the economy is getting worse. Explain how that could happen. (Normally, that drop would be a good sign for the economy.)

3) (14 points) For EITHER *providing public goods* OR *promoting competition*, explain how that is an economic reason for a government.

4) (14 points) Answer EITHER Part A OR Part B.

A) Give an example of frictional unemployment. Explain how that example fits the definition.

B) What is meant by the *value added* method of calculating GDP? Explain why that method should give the same result as the expenditure method.

5) (16 points) Answer EITHER Part A OR Part B.

A) Suppose people had expected 12% inflation. If the previous year's CPI was 300 and this year's CPI turned out to be 330, then what was the inflation rate? Who would gain from this and who would lose? Explain your logic. 1

B) Use the table to the right to calculate the total taxes paid, the marginal tax rate, and the average tax rate for a person earning \$50,000. Show all work and briefly explain your work.

Income	Tax rate
\$0 - 20,000	10%
\$20,000 - 40,000	30%
\$40,000 - \$90,000	40%
>\$90,000	50%

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

A) If inflation is fully expected, then why does it inflict almost no harm to most people?

B) If the inflation is fully expected, then how does it hurt people? Mention two methods.

7) (20 points) What is the problem facing Social Security? For EITHER the "solution" in Part A OR the "solution" in Part B, explain how that would reduce the problem with Social Security. Would you use it? Explain your logic.

A) Raise the retirement age.

B) Use means testing. If you earn over a certain amount while retired, you will get less benefits and if you earn a large amount, you will get no benefits.