

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 150 points (to be scaled up to 210 points) and is scheduled to take 75 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.

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

A) When we calculated GDP, NDP, NI, PI, and DPI, where in the calculation did the payment of the Social Security check from the government to retired people go? Explain why it goes there.

B) Explain why the *value added* method of calculating GDP should give the same result as the *expenditure* method.

2) (12 points) For EITHER the event in Part A OR the event in Part B, tell me how much GDP changes, which part of GDP changes and how you reached your conclusion. If you do not use a number, tell me why you did not use it.

A) You buy a house for \$200,000. The real estate agent's commission was \$14,000.

B) You buy \$500 worth of stock. The stock broker's commission was \$10.

3) (12 points) Answer EITHER Part A OR Part B.

A) President Trump has moved the USA away from freer trade. Is the long-term impact of that on our economy good or bad? Explain your logic.

B) Explain why the AD curve slopes down.

4) (12 points) Answer EITHER Part A OR Part B.

A) When we estimated the government spending multiplier, what did we assume about tax revenue? If we relax that assumption, what will occur? How does that affect the size of the government spending multiplier? Explain your logic.

B) When we calculated the government spending multiplier, what was the first number we came up with? Assuming that number is correct, how much would the government need to spend if they wanted to increase GDP by \$100,000? Explain how you reached your conclusion and show all calculations.

5) (14 points) Answer EITHER Part A OR Part B.

A) Suppose at the start of the year, the CPI was 900 and at the end of the year it was 990. Calculate the inflation rate showing all work. If the expected inflation rate had been 4%, then name one group of people who are hurt. Explain why they are hurt.

B) Suppose a person's consumption function is  $C = 1000 + .95(Y-T)$  and their income is \$100,000.

Calculate their MPC, MPS, APC, and APS. Show all work. If there is no work, state how you got your answer.

6) (14 points) Answer EITHER Part A OR Part B.

A) In Homework #7, I told you that for certain circumstances, if you start saving now for retirement immediately upon getting a job, you only need to save about half as much per month than if you waited 10 years to start saving. Explain the two reasons for this.

B) A typical savings account pays 1% interest. How long will that take to double? A typical credit card

charges 24% interest. How long will that take to double? Show all work and briefly explain how you got your answers.

7) (14 points) Answer EITHER Part A OR Part B.

A) What is the general reason why increasing a tax could cause the government to get less tax revenue? Make sure your explanation applies to all taxes. Use a specific numerical example of an excise tax to prove your point.

B) Use the table to the right to determine the marginal tax rate, total taxes paid, and average tax rate for a person earning \$60,000. Show all work. If there is no work then state what you did.

Tax Bracket	Tax Rate
\$0-10,000	10%
\$10,000-\$30,000	20%
\$30,000-\$70,000	30%
\$70,000-\$100,000	40%
>\$100,000	50%

8) (14 points) All statistics have problems with their definition which makes them less useful than we would like. For EITHER the unemployment rate OR the inflation rate, explain two problems with using the statistic.

9) (16 points) Answer EITHER Part A OR Part B.

A) What is the long-term problem facing Social Security? What are the two trends which mean the problem will get worse for at least a decade? One proposal to solve the problem is to *eliminate the cap on taxable wages*. How would that reduce the problem? Would you do that as part of your proposal? Explain your logic.

B) What is the long-term problem facing Social Security? What are the two trends which mean the problem will get worse for at least a decade? One proposal to solve the problem is to *raise the retirement age*. How would that reduce the problem? Would you do that as part of your proposal? Explain your logic.

10) (16 points) Draw the SRAS/LRAS/AD diagram. Illustrate the effects of EITHER the event in Part A OR the event in Part B. Explain why the curve(s) moved as drawn. What happens to the price level, real GDP, and the unemployment rate?

A) The tax rate increases.

B) The population increases.

11) (16 points) Draw the 45° diagram, a.k.a. the Keynesian Cross diagram. Illustrate the effects of EITHER the event in Part A OR the event in Part B. Explain why the curve(s) moved as drawn. What happens to the real GDP?

A) The marginal propensity to consume increases.

B) Taxes decrease.