

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

A) To retire and keep your standard of living, you need to save 20 times your annual income. Suppose your retirement fund earns 6% interest and if you earn \$50,000/year. If you save for 40 years, you need to save \$502.14/month. If you save for 30 years, you need to save \$1070.05/month. There are two reasons why the extra 10 years greatly reduces how much you have to save. What are the two reasons? Explain your logic. (Note that this means you should start saving for retirement today.)

B) China basically does not enforce intellectual property rights. What does that mean? Explain why that will hurt them in the long run.

2) (14 points) For EITHER the aspect in Part A OR the aspect in Part B, explain what it means and how that helps economic development, i.e., the economy to grow more.

A) letting creative destruction run its course.

B) limiting protectionism

3) (14 points) Answer EITHER Part A OR Part B.

A) I heard on West Virginia Public Radio that West Virginia has an abnormally large percentage of the population who are defined as “disconnected youth.” Wikipedia defines disconnected youth as “young people aged 16 to 24 who are neither working nor in school.” How would having a large percentage of disconnect youth affect the labor force participation rate and the unemployment rate? Explain your logic.

https://en.wikipedia.org/wiki/Disconnected_youth

B) The unemployment rate was the same when Obama was running for his second term as it was on the day Obama took office. However, the labor force participation rate dropped significantly from 66.2% to 63.6%. What does that mean? What did people do to cause that change? Explain your logic.

4) (16 points) Answer EITHER Part A OR Part B.

A) Suppose the price level at the start of the year was 400 and at the end of the year it was 412. Calculate the inflation rate showing all work. If people had expected at the beginning of the year that the inflation rate would be 6%, then who got hurt by the inflation? Explain your logic by mentioning two groups of people who are hurt.

B) What are the two costs of high inflation which was predicted accurately? Explain how high inflation causes those two costs.

5) (18 points) Answer EITHER Part A OR Part B.

A) Explain the general argument about how increasing a tax rate could result in less tax revenue. Give a specific mathematical example to explain your point.

B) Suppose a person was facing the following tax brackets. If they earned \$50,000 per year, then what are their marginal tax

bracket	rate
\$0 - \$20,000	10%
\$20,000 - \$40,000	20%
\$40,000 - \$60,000	30%
> \$60,000	40%

rate, total taxes paid, and average tax rate? Show all work and if there is no work, then explain how you got your answer.

6) (18 points) Answer EITHER Part A OR Part B.

A) What information do you need to calculate NI if you already had NDP? Explain why you add or subtract those items.

B) Every statistic has its problems. What are two problems which could result in the GDP giving a misleading indication? Explain how that occurs.

7) (18 points) Answer EITHER Part A OR Part B.

A) Suppose a person's consumption function was given by $C = 1000 + .8(Y-T)$. Their disposable income is \$10,000. Find their MPC, MPS, APC, and APS. Show all work. If there is no work, then explain how you found it.

B) What does MPC mean? What is the value that we normally assume it to be? Why does that value make sense? What does MPS mean? What is the formula for calculating it?

8) (20 points) Answer EITHER Part A OR Part B

A) What are the four parts of GDP? For three of them, give an example of them and briefly state why your examples fit those categories.

B) Suppose that you bought stock for \$300 and paid \$10 commission. How much did GDP go up? Which part of GDP went up? Explain your logic and if some of it is not part of GDP, explain why not. Suppose you bought a used car for \$7000 from a dealer and they paid \$4000 it. How much did GDP change? Which part of GDP went up? Explain your logic and if some of it is not part of GDP, explain why not.

9) (20 points) Answer Part A OR Part B

A) What is the long-term problem facing Social Security? What are the two long-term trends which mean the problem will get worse for the next decade? State how they will make the problem worse. One proposal to reduce the problem with Social Security is to "means test the benefits." What does that mean? How would that reduce the problem? Should this be part of a package to save Social Security? Explain your logic.

B) What is the long-term problem facing Social Security? What are the two long-term trends which mean the problem will get worse for the next decade? State how they will make the problem worse. One proposal to reduce the problem with Social Security is to raise the retirement age. How would that reduce the problem? Should this be part of a package to save Social Security? Explain your logic.