Do NOT write your name anywhere. (Canvas will tell me who turned in the exam.) Take pictures of your answers and use your own software or https://pdfcandy.com/ to create a PDF for each answer which requires an upload. If it is large, resize it to 8.5" x 11" or A4. Upload that to Canvas. Upload each answer as a separate file with that question. Failure to follow directions will cost you one point. People with Apple products may need to us CamScanner app.

You are not allowed to use your books, notes, the internet, or other people when taking this test. You can use the internet to access Canvas and to convert your answers to PDF files. Nothing else.

If you run out of time or lose your internet connection, you can do a second submission. You do NOT have to redo the questions you already did. I will be able to see every submission. If you have problems, you can always contact me via Zoom or e-mail. If you use Zoom, open it in a new tab or window.

Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 150 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 have it set up to only give you an hour and a half.

1) (10 points) Answer EITHER Part A OR Part B.
A) In the song "Only The Good Die Young," Billy Joel sings, "They did not tell you everything, the things you might have done." What is the term from this course he is describing? Why is it important to know that information?
B) In the song "Dopeman" by Less Than Jake, they sing, "It's either that (selling dope) or working for minimum wage at the 7-11." Use terminology from this course to explain what they are explaining. (An aside note, they are not condoning anything; they are explaining it.)

2) (12 points) Answer EITHER Part A OR Part B.
A) There are four qualities which money needs to have to do a good job as money. Tell me THREE of them. For ONE of them, does M1 or M2 do a better job at it? Briefly explain your logic.
B) Explain the Keynsian Liquidity Trap. Why would it mean that monetary policy may not work some times?

3) (12 points) Answer EITHER Part A OR Part B.
A) During the semester, I gave you some numbers which showed that if you wait 10 years to start saving for retirement, you have to save about twice as much as you would have had to save if you started now. Explain the two reasons why this is true.
B) Explain why the value added method of calculating GDP should give the same answer as the expenditure method.

4) (14 points) Answer EITHER Part A OR Part B.
A) What is the *Law Of Comparative Advantage*? What does that imply about whether President Trump was correct in pulling us out of a free trade area which was forming called TPP? (TPP would have had free trade between about a dozen countries, which border the Pacific Ocean.)
B) All statistics have problems which make the statistic less useful than we would like. What are two problems with the calculation of the unemployment rate which make it less useful than we would like? Explain your logic.

5) (16 points) Answer EITHER Part A OR Part B.
A) Draw the PPF for face masks and hand sanitizer. Illustrate the effects of COVID-19 on the graph. Explain why the curve moves as drawn.
B) Draw the PPF for cotton clothing and automobiles. Illustrate the effects of a drought in the states

which grow a lot of cotton. Explain why the curve moved as drawn.

6) (18 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for electricity from coal. Obviously, that causes a negative externality. Use your diagram to prove that unless the government intervenes, too much electricity from coal will be produced. Explain your logic. Do NOT worry about solving the problem.
B) Draw the supply and demand for apples. Illustrate the effect of an increase in the wage rate paid to people who pick apples. Explain why the curve moves as drawn. What happens to the price and quantity sold?

7) (18 points) Answer EITHER Part A OR Part B.
A) Suppose there is a project which will cost $3000. It will enable the organization who does the project to sell 1 item to each of 800 people at $5 profit per item. There is a negative externality which affects 700 people and it costs each of them $3 each. Should the project be done? Explain your logic. Would the market provide it? Explain your logic. Would the government provide it? Explain your logic.
B) What is the long-term problem facing Social Security? What long-term trends mean the problem will be getting worse for quite a while more? One way to reduce the problem is to cut the Social Security benefits for those who will retire in the future. How would that reduce the problem? If you were President of the USA, would you use this as part of your plan to save Social Security? Explain your logic.