

**If you are not in the classroom with me, you must be on Zoom with both your camera and microphone on.**

Do NOT write your name anywhere. (Canvas will tell me who turned in the exam.) Take pictures of your answers and use your own app or one of the pages I have links to on my home page to create a PDF for each answer which requires an upload. If it is large, resize it to 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 use 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.

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 have it set up to only give you an hour and a half.

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

A) Use terminology from this course to explain why engineering professors ask for more pay than art professors.

B) We had multiple events which move the demand curve. One of them can be explained as opportunity costs. Which is? Why does that move the demand curve?

2) (12 points) Answer EITHER Part A OR Part B.

A) Draw a PPF for cotton pants and smart phones. Illustrate the effects of an increase in the population. Explain why the curve moved as drawn.

B) Draw a PPF for wool coats and briefcases. Illustrate the effects of a lot of sheep dying from an illness which makes their wool unusable. Explain why the curve moved as drawn.

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

A) State and prove the Law of Comparative Advantage.

B) What is meant by *ceteris paribus*? Why is it important in this course?

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

A) Draw the supply/demand for hand sanitizers. Illustrate the effects of COVID-19. Explain why the curve(s) moved as drawn. What happens to the price of hand sanitizers and the quantity sold?

B) Draw the supply/demand for dinners at toilet paper. Illustrate the effects of COVID-19 last March and April. Explain why the curve(s) moved as drawn. What happens to the price of toilet paper and the quantity sold?

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

A) Draw the supply and demand for corn on the cob in a grocery store. Illustrate the effects of a decrease in the price ethanol. Explain why the curve(s) moved as drawn. What happens to the price of corn on the cob and the quantity of corn on the cob sold? (In the USA, most ethanol comes from corn.)

B) Draw the supply and demand for guitars. Illustrate the effects of a decrease in the price of wood. Explain why the curve(s) moved as drawn. What happens to the price of a guitar and the quantity of guitars sold?

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

A) Draw the supply and demand for hats. Illustrate the effects of a price ceiling on hats. Explain why the diagram changed as drawn. Prove that both consumers and producers are hurt.

B) Draw the S/D for watches. Illustrate the effects of a quota on the diagram. Explain why it changed as drawn. Are consumers helped or hurt? Explain your logic. Are producers helped or hurt? Explain your logic.

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

A) Find the x-intercept, y-intercept, and slope of the line  $Y = 5 - (2/3)X$ . Plot the line. Show all calculations. If there are no calculations, then state how you got the answer.

B) Find the slope of the PPF in the [figure the document](#) at the point, pens = 4. Show all work and briefly explain what you did. **I assume you have no way to print the figure I provided. Draw it on your paper as close to the original picture as you can get.**