Microeconomics 2302 questions for exam 3

You must send me your answers to all of the questions and I will grade 6 of your answers.

1. Technology, R & D, and Efficiency.

a. Invention:

i. Thoroughly and completely explain Invention.

ii. Distinguish between invention as a process and invention as a result and give 2 examples of each.

iii. The case of a slow growth / no growth economy.

1. We live on a planet with finite resources which makes

continued economic growth difficult to maintain. Please explain how invention as a process and invention as a result might be impacted by a slow growth /no growth economy.

iv. What can we do to cause Invention to happen in a slow growth / no growth economy? Be specific.

b. Innovation.

i. What is it?

ii. For each of the types of innovation covered in the slides and audio:

1. Provide 2 examples of each (that were not included in the

slides or audio) and explain why these are good examples of those types of innovation.

2. For each of your examples explain how these two types of innovation were used to drive up profits.

a. Discussthe2keyfactorsrequiredtodriveupprofits (drive down costs and drive up revenues). Include explanation of how new products gain customer acceptance, including the importance of the relationship between price and utility.

Creative Commons Attribution 4.0 License, CC BY Charles Hackner Houston Community College unless otherwise noted.

iii. The case of a slow growth / no growth economy.

1. Explain how our ability to do process and product innovation

might be impacted by a slow growth / no growth economy, and what we can do about the problem.

c. Diffusion.

i. Define it,

ii. Explain how it works,

iii. Give 3 examples involving firms that have lead diffusion of some innovation and why these represent good examples of diffusion,

iv. The case of a slow growth / no growth economy.

1. Discuss how diffusion might be affected by a slow growth / no

growth economy.

d. You work for Mr. Elon Musk and he has asked you to explain how his company can determine its optimal level of R&D spending.

i. Please explain the general concept of optimal level of R & D spending

ii. List and explain the marginal cost and marginal benefit components.

iii. Explain how the optimal level of R & D spending is computed.

2. Technology, R & D, and Efficiency.

You are a business manager for Coca Cola and some new competitive soft drinks are being introduced with great customer acceptance.

a. Fastsecondstrategy.

Creative Commons Attribution 4.0 License, CC BY Charles Hackner Houston Community College unless otherwise noted.

1. You have a good list of items in the slide set – just need to

provide explanations of the items.

1. Feel free to use graphs to support your explanation.

2. Don’t forget to let him know that returns are expected, not

guaranteed.

i. Explain the fast second strategy.

i. Explain why and how Coke could use the fast second strategy to

increase its economic profit using 2 examples.

b. Explain to your boss how Coke can use the protection provided by patents, copyrights, and trademarks to increase their economic profits of the company.

c. ExplaintoyourbosshowCokecanusetheirBrandtoincreasetheir economic profits.

i. Discuss the following and how each can be used to increase a firms’ economic profit:

1. Brand-name recognition 2. Brand equity

3. Brand promise

4. Brand personality

d. Explain to your boss how technological advance increases productive efficiency and allocative efficiency.

3. The demand for resources

a. You are an Economics teacher. Please explain to your class the significance of resource pricing on resource allocation among firms and industries,

b. Please explain to your class the significance of resource pricing on the determination of income,

c. Resource pricing impact on firms

i. Explain how resource prices affect the ability of firms to acquire

resources and the subsequent impact on output,

ii. Explain the impact of resources prices on the ability of firms to

minimize costs.

d. Explain to the class the marginal productivity theory of resource demand and why businesses care about it.

i. Discuss what each of the 3 protections apply to, and

ii. Discuss how each will help a firm achieve economic profits.

i. Discuss the impact of technological advancements on productive and

allocative efficiency.

i. State the assumptions.

ii. Explain MRP and MRC, and the firms’ rule for employing

resources.

Be sure to explain the terms and what they mean to a business.

e. Explainthedeterminantsofresourcedemand.

i. Discuss the 3 determinants of resource demand.

1. Changes in product demand 2. Changes in productivity

a. Quantitiesofotherresources

b. Technological advance

c. Qualityofthevariableresources

3. Changes in the prices of other resources including:

a. Thecaseofsubstituteresources–thesubstitutioneffect

and the output effect

b. The case of compliments

4. The demand for resources.

a. Pleasethoroughlyexplainthefollowingdeterminantsoftheelasticityof resource demand.

i. Ease of resource substitutability

ii. Elasticity of product demand

iii. Ratio of resource cost to total cost

b. Please explain how a firm would determine the optimal combination of resources required to produce a given level of output.

5. Government Regulation of business:

a. Regulation

i. List and explain 4 reasons in favor of federal government regulation

of business. Include the economic consequences of each for the economy and you individually.

ii. List and explain 4 reasons against federal government regulation of business. Include the economic consequences of each for the economy and you individually.

b. Explain why the effectiveness of antitrust laws changes through time. Include the role of politics and elections.

Creative Commons Attribution 4.0 License, CC BY Charles Hackner Houston Community College unless otherwise noted.

c. ExplainIndustrialRegulation(purpose,problems,andeconomicimpacts) d. Explain Social Regulation (purpose, problems, and economic impacts)

6. Income inequality

a. Pleaseexplain5factorsthathavecontributedtoincreasedincome inequality since 1969.

b. What are 5 results of the growing income inequality in America.

c. For each of the items listed above in part b, explain what might be done to eliminate the problems that cause growing income inequality.

d. Explain how discrimination reduces domestic output and income,

i. Look at the items under Discrimination in the notes and explain how each contributes to the reduction of domestic output and income.

e. SocialInsuranceProgramsandPublicAssistancePrograms.

i. Social Insurance

1. What is it?

2. List and explain 3 examples of social insurance programs and

what they do for the beneficiaries of each program.

ii. Public Assistance

1. What is it?

2. List and explain 3 examples of public assistance programs and

what they do for the beneficiaries of each program.

iii. Explain the difference between the two types of programs.

f. Discuss the pros and cons of reducing spending on these two types of programs relative to stimulating economic growth.

i. Some Google research should help with this.

7. On the subject of Poverty

a. Definepoverty–checkdefinitioninnotes,checkgoogleaswell

b. What is the most recent Federal Poverty Guideline for a family of 4?

c. Assumeahouseholdof2adultsworkingatfulltimejobspayingminimum wage, with 2 elementary school age children. Please create a monthly budget for this family and explain each budget line item. Remember to

take 15% off their gross earning for taxes. Explain some of the challenges this family will face.

d. When the national unemployment rate was around 4% or less, please explain why there were so many people living in poverty in America? Where were they located geographically? Were race was more likely to be living in poverty? Which gender was more likely to be living in poverty?

e. Explain5thingsthatneedtobedonetosignificantlyreducethenumberof people in poverty going forward.

8. The American economy has been shut down because of the COVID-19 virus. The unemployment rate was approximately 15%. Assuming that the leadership of the Federal Government had scientific evidence that the worst is behind us, please explain in detail how you would restart the national economy. Focus on what industries you would open, in what order, and why. I suggest you go to the BEA.GOV website and review the input output tables to gain some perspective on how industries interact.