



College of Business Administration
Department of Economics
Aggregate Economic Conditions & Analysis
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ECO 6206-0001
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Assignment II

Question I

Hours Worked	Total Production of Output	MPL of the Last Hour Worked
0	0	XX
1	100	---
2	170	---
3	220	---
4	240	---
5	250	---

- Complete and graph the Marginal Productivity of Labor (MPL).
- Assume that output rises by 10 % at every hour. Illustrate the new MPL on the same graph of a).
- What kind of shift is this to the production function?
- How does this shift affect the marginal product schedule?

Question II

Using a production function and indifference curve, illustrate the equilibrium choice of consumption and work for Robinson Crusoe.

Question III

Suppose that the Cobb-Douglas production function is given by $Y = A + z K^{0.3} L^{0.7}$

- If $A = 0$, $z = 1$, and $K = 1$, graph the production function. Is the marginal product of labor positive and diminishing?
- Now – on the same graph – graph the production function when $A = 0$, $z = 2$ and $K = 1$. Explain how the production function changed from part (a).
- What is the marginal product of labor? What is the marginal product of capital? Graph the marginal product of labor for $(A,z,K) = (0,1,1)$, $(0,2,1)$, $(0,1,2)$, and explain.