

SAMPLE SECOND MIDTERM EXAMINATION

PART I: SHORT ANSWER

[36 POINTS TOTAL]

Answer all questions. Be sure to explain your answers and to draw diagrams where they are appropriate.

1. Explain what is wrong with the following statement: "When there is a binding minimum wage, workers earn more than their marginal revenue product." **[9 points]**
2. Suppose blight devastates lemon orchards, so that the price of lemons rises sharply. How would you expect this to affect wages and employment in lime orchards? (Note: lemons and limes are substitutes.) **[9 points]**
3. Explain the reasoning behind the statement: "Technological change is the main determinant of economic growth over long periods of time." **[9 points]**
4. How would an increase in normal government spending affect the long-run equilibrium real interest rate and normal investment? **[9 points]**

PART II: PROBLEMS

[40 POINTS TOTAL]

Answer both parts of each question. Be sure to explain your answers and to draw diagrams where they are appropriate.

5. This question asks you to think about the effects of technological progress that causes workers be more productive in making consumer electronics (such as personal computers, tablets, and smart phones).
 - a. What is likely to happen to the wages and employment of workers in this industry as a result of the technological progress? Why? **[10 points]**
 - b. Would you expect the effects you described in part (a) to be larger or smaller if the demand for consumer electronics is highly elastic? **[10 points]**
6. Consider a country, such as China, with a comparative advantage in goods produced using low-skilled labor.
 - a. If China switches from being closed to international trade to engaging in trade, what will happen to the price in China of goods made using low-skilled labor? **[10 points]**
 - b. Assuming that workers within China differ in their ability to produce goods using high-skilled and low-skilled labor, show what the PPC and CPC of China are likely to look like when China is open to trade. **[10 points]**

PART III: MULTIPLE CHOICE

[24 POINTS TOTAL]

Circle the **best** answer to each question. Each question is worth 2 points.

7. If the price level was 8 in 1929 and 120 in 2016, \$3,000 in 1929 is equivalent to:
 - a. \$200 in 2016.
 - b. \$375 in 2016.
 - c. \$3,000 in 2016.
 - d. \$45,000 in 2016.
8. Among the subjects that Piketty and Saez discuss in "Income Inequality in the United States, 1913–1998" are:
 - a. the Weber hypothesis about the role of religious attitudes in determining inequality, and evidence about income differences across different religious groups.
 - b. the Easterlin hypothesis about the importance of demographics for inequality, and the role of immigration in affecting inequality.
 - c. the Kuznets hypothesis about how inequality follows an inverse-U shape as countries develop, and the role of income and estate taxation in affecting the evolution of inequality.
 - d. the Schwartz hypothesis about differences in inequality across countries, and the impact of monetary policy on inequality.
9. A firm's demand for rental capital slopes down because:
 - a. when the rental price of capital is lower, the firm shifts from buying capital to renting it.
 - b. the marginal revenue product of capital declines as the firm rents more capital.
 - c. when the rental price of capital is lower, the firm employs more workers.
 - d. a firm that rents more capital is able to negotiate a lower rental price per unit.

10. If the nominal interest rate and the inflation rate are both 3 percent, the real interest rate is:
- 6 percent.
 - 3 percent.
 - 0 percent.
 - indeterminate.
11. The amount of inventive activity is likely to be increased by:
- stronger property rights.
 - greater education.
 - increased government support for research and development.
 - increased capital per worker.
 - a and c.
 - b and c.
 - a, b, and d.
 - a, b, c, and d.
12. If some less-educated workers become more educated, this will tend to:
- reduce income inequality and raise potential output per person.
 - reduce income inequality and have no effect on potential output per person.
 - raise potential output per person and have no effect on income inequality.
 - have no effect on either income inequality or potential output per person.
13. The present value of a payment to be received in the future will be larger:
- the further in the future the payment is to be received.
 - the less far into the future the payment is to be received.
 - the higher the interest rate.
 - the lower the interest rate.
 - a and c.
 - a and d.
 - b and c.
 - b and d.
14. An increase in normal capital per worker will:
- increase potential output per person.
 - decrease potential output per person.
 - have no effect on potential output per person.
 - could either increase or decrease potential output per person, depending on whether there are diminishing returns to capital.
15. Imposing a binding minimum wage will:
- make everyone who held a job at a wage below the new minimum better off.
 - make everyone who held a job at a wage below the new minimum worse off.
 - make some people who held a job at a wage below the new minimum better off and some worse off.
 - have an ambiguous effect on workers' welfare, but unambiguously make firms better off.
16. If the world price of a good that we export falls:
- both our production and our exports of the good will fall.
 - our production of the good will not change, but our exports of the good will fall.
 - our exports of the good will not change, but our production of the good will fall.
 - both our production and our exports of the good will not change.
17. If inflation averages 1% per year from 2017 to 2027, in 2027 prices will be:
- about 1% higher than in 2017.
 - about 10% higher than in 2017.
 - about .0110 higher than in 2017.
 - it is not possible to tell.
18. Normal average labor productivity is:
- Y^*/POP .
 - Y^*/N^* .
 - N^*/POP .
 - N^*/K^* .
 - none of the above.