## Final Exam

You have until 12 noon to complete the exam, be certain to use your time wisely. Answer all questions directly on the exam. Calculators may not be used. Remember to put your name on the exam. Good luck!

## Name:

## ID Number:

1. (15 points) Discuss the difficulties the Continental Congress had financing the Revolutionary War. Be certain to describe the possible methods the Continental Congress had to finance the war, the drawbacks of these various methods, and the problems the Continental Congress faced with its chosen ways of raising revenue.
2. (10 points) Explain why we typically expect life expectancy to rise as national income increases and why the United States instead exhibited a negative relationship between national income and life expectancy in the middle of the 19th century.
3. (10 points) What is the economic logic underlying the claim that increased rates of immigration will harm native-born workers while benefiting owners of capital?
4. (20 points) The graph below measures the marginal product of labor in manufacturing on the left vertical axis and the marginal product of agriculture on the right axis. Notice that $M P L_{M}$ is constant and $M P L_{A}$ is diminishing. The horizontal axis measures the number of workers in manufacturing from left to right and the number of workers in agriculture from right to left. The economy has 200 workers, all of whom work either in manufacturing or agriculture. So the left most corner of the graph would correspond to having zero workers in manufacturing, 200 workers in agriculture, a current $M P L_{A}$ of 50 and a current $M P L_{M}$ of 100.

(a) Suppose that under the current distribution of workers in the economy, a worker added to the manufacturing sector would be more productive than a worker added to the agricultural sector. Show a distribution of workers on the graph consistent with this description. Also show the amount of output being lost by being in this situation rather than at the efficient distribution of workers. Be certain to clearly label everything you include on the graph.
(b) If the economy begins in the situation described in part (a), what would you expect to happen to the distribution of workers, the agricultural wage and the manufacturing wage over time? Be certain to explain your answer.
(c) Now assume that the economy is originally in equilibrium at the efficient allocation of workers. If 50 immigrants join the economy, increasing the total labor force to 250 workers, what will happen to the equilibrium number of workers in agriculture and the equilibrium number of workers in manufacturing? Provide specific numbers if possible and be certain to fully justify your answer (creating a new graph may be helpful).
5. (15 points) One claim that has received considerable debate is that slavery enabled southern farms using slave labor to be more efficient than farms in either the South or the North using free labor. Claims of the greater efficiency of southern farms using slave labor often center around the use of the gang system.
(a) Why might the use of the gang system have led to more productive farming?
(b) Why was slavery necessary for the implementation of the gang system? Why was the gang system not used extensively after the abolition of slavery?
6. (a) (6 points) Explain two ways in which banks promoted American economic growth in the 19th century.
(b) (9 points) What factors influenced the value of bank notes as a form of currency? For each factor you give, be certain to explain how the factor influenced the market value of a note.
7. (15 points) Explain two different theories for why the North industrialized sooner than the South, shifting a greater proportion of its workforce into the manufacturing sector. Both of the theories should be focused on economic differences between the regions, not on differences in social norms or political institutions.
