

Exam 1

Pledge: "I pledge my honor that during this examination I have neither given nor received assistance, and that I have seen no dishonest work."

Signed \_\_\_\_\_

Name \_\_\_\_\_

"I have intentionally not signed the pledge." \_\_\_\_\_  
(check only if appropriate)

On multiple choice, circle the letter of the best answer.

On graphs, label all equilibrium values, curves, and axes, where relevant.

The number of points each question is worth out of a total of 250 points is indicated in ( )s next to each question.

(40) 1. Solve the following Classical Model

(1)  $Y = 40 + 2N$

(2)  $N^d = 100 - 4(w/P)$

(3)  $N^s = 50 + 6(w/P)$

(4)  $N^d = N^s$

(5)  $P = MV/Y$                       where  $M = 300$  and  $V = 2$

(6)  $I = 10 - 2r$

(7)  $S = 4 + 4r$

(8)  $I = S$

where  $Y$  is real output,  $N$  is employment,  $N^d$  is labor demand,  $N^s$  is labor supply,  $P$  is the price level,  $w$  is the nominal wage,  $w/P$  is the real wage,  $M$  is the money supply,  $V$  is velocity,  $I$  is investment,  $S$  is savings, and  $r$  is the real interest rate. Write in your answers for each variable, and show your work, on the next page.

$w/P$  \_\_\_\_\_

$N$  \_\_\_\_\_

$Y$  \_\_\_\_\_

P \_\_\_\_\_  
w \_\_\_\_\_  
r \_\_\_\_\_  
I \_\_\_\_\_  
S \_\_\_\_\_

(40) 2. Graphically depict the Classical Model below, with the equilibrium values for question (1) indicated on your diagrams.

a. labor market

b. production function

c. aggregate demand diagram

d. loanable funds market

(55) 3. Graphically depict a Classical Model below (different from questions (1) and (2)) which shows the impact of an increase in labor demand, due to an increase in the skill levels of workers.

a. labor market

b. production function

c. aggregate demand diagram

d. loanable funds market

(30) 4. Assume a different Classical Model from the one in questions (1), (2) and (3). Assume that in this different Classical Model, the Money Supply has been cut from 500 to 250. Also, assume that the price level was originally 4 (ie. before the money supply reduction) and the nominal wage was originally 8 (ie. before the money supply reduction). What will be the values for the following after the money supply reduction?

p \_\_\_\_\_

w \_\_\_\_\_

w/P \_\_\_\_\_

(5) 5. According to the assumptions of the Classical Model in general ( not for the specific one depicted in question (1) above), the production function exhibits

- a. increasing returns throughout
- b. diminishing (decreasing) returns throughout
- c. negative returns throughout
- d. diminishing (decreasing) returns, then increasing returns at higher employment levels

(5) 6. The profit maximization condition for hiring workers according to the Classical Model reflects, or is consistent with

- a. where the marginal revenue product equals the real wage
- b. where the marginal product of labor equals the nominal wage
- c. where the marginal product of labor equals the real wage
- d. none of the above

(5) 7. According to the assumptions concerning the labor supply in the Classical Model, the labor supply curve slopes upward because if the real wage rises

- a. the disutility from extra work outweighs (more than offsets) the utility from the extra income
- b. the disutility from less leisure outweighs the utility from the extra income
- c. the utility from the extra income outweighs the disutility from more leisure

d. the utility from extra income outweighs the disutility from extra work

(5) 8. The Classical Model assumes

- a. continuous market clearing
- b. perfectly flexible prices
- c. there is always equilibrium
- d. all of the above

(40) 9. Assume the following labor demand and labor supply functions for a Classical Model:

$$(1) N^d = 280 - 4(w/P)$$

$$(2) N^s = 40 + 2(w/P)$$

a) What is the equilibrium real wage ie.  $(w/P)^*$ ?

$w/P$  \_\_\_\_\_

b) What is the equilibrium employment level ie.  $N^*$ ?

$N$  \_\_\_\_\_

c) If we were to just reach 0 unemployment at a real wage of 50, what is the amount of voluntary unemployment in this Classical Model, assuming the equilibrium real wage which clears the labor market holds?

voluntary unemployment \_\_\_\_\_

d) If we were to just reach 0 unemployment at a real wage of 50, and because of unions or a minimum wage the real wage imposed onto this otherwise Classical Model is 50, what would be the amount of voluntary unemployment according to Classical economists?

voluntary unemployment \_\_\_\_\_

(5) 10. According to Keynes, involuntary unemployment exists because, in part

- a. nominal wages are largely a function of prices
- b. workers bargain over the real wage, not the nominal wage
- c. both a and b
- d. neither a nor b

(5) 11. According to the Classical Model, Say's Law holds because, in the loanable funds market

- a. the interest rate adjusts to ensure equilibrium
- b. the price level adjusts to ensure equilibrium
- c. the real wage adjusts to ensure equilibrium
- d. the nominal wage adjusts to ensure equilibrium

(5) 12. According to Keynes, an increase in which of the following would decrease aggregate demand?

- a. gross exports
- b. net exports
- c. imports
- d. investment

(5) 13. According to the assumption of exogenous money, which Keynes utilized as a simplifying assumption in his model of the money market, an increase in the interest rate

- a. reduces the amount of money supplied
- b. increases the amount of money supplied
- c. does not change the amount of money supplied
- d. results in an infinite change in the amount of money supplied

(5) 14. According to Keynes, an increase in the interest rate

- a. reduces the amount of money demanded
- b. increases the amount of money demanded
- c. does not change the amount of money demanded
- d. results in an infinite change in the amount of money demanded

**DID YOU REMEMBER TO CONSIDER THE PLEDGE**