ECO 305: Intermediate Macroeconomics **Name (10 points):** ______________________

Instructor: James M. Murray, PhD

Practice Exam 3

Multiple-Choice: 2 points each. Choose the response that best answers each question.

1. Which of the following can cause the labor supply curve (modeled with employment on the horizontal axis and wage on the vertical axis) to **shift to the left**?

   (a) Decrease in interest rate

   (b) Decrease in wage

   (c) Increase in wage

   (d) Decrease in marginal product of capital

2. Which of the following can cause a **leftward shift** in the demand for labor (modeled with employment on the horizontal axis and wage on the vertical axis).

   (a) Improvement in technology

   (b) Drop in the marginal product of labor

   (c) Increase in interest rate

   (d) Increase in wage

3. Which of the following could cause a **leftward shift** in consumption demand (modeled with the interest rate on the vertical axis and quantity of consumption on the horizontal axis)?

   (a) Increase in current government expenditures financed with an increase in future taxes

   (b) Increase in interest rate

   (c) Decrease in interest rate

   (d) Decrease in future taxes

4. Which of the following could lead to a **leftward shift** in the investment demand curve (when labeled with the interest rate on the vertical axis and quantity of investment on the horizontal axis)?

   (a) Destruction of capital stock

   (b) Increase in the rate in which capital depreciates

   (c) Temporary increase in total factor productivity

   (d) Permanent improvement in technology

5. Which of the following could lead to an **increase** in interest rates in a general equilibrium model with consumer and producer optimization?

   (a) Temporary decrease in energy prices leading to higher business productivity

   (b) Destruction of capital stock

   (c) Decrease in government expenditures

   (d) Increase in consumers' willingness to work

6. Which of the following models is behind the consumption demand curve (with the interest rate on the vertical axis and quantity of consumption on the horizontal axis)?

   (a) Investment decision

   (b) Solow growth model

   (c) Profit maximization model

   (d) Consumption / saving model

7. Which of the following models is behind the investment demand curve (with interest rate on the vertical axis and quantity of investment on the horizontal axis)?

   (a) Consumption / leisure model

   (b) Solow growth model

   (c) Profit maximization model

   (d) Consumption / saving model

8. Which of the following describes a crowding-out effect?

   (a) An increase in government expenditures is financed by an increase in taxes

   (b) An increase in government expenditures leads to a decrease in leisure, partially offsetting the positive impact on real GDP

   (c) An increase in government expenditures leads to a decrease in consumption, partially offsetting the positive impact on real GDP

   (d) An increase in government expenditures leads to an increase in investment

9. Which of the following government policies will likely have the largest impact on real GDP?

   (a) Decrease in government expenditures to fund a decrease in taxes in the current period.

   (b) Decrease in taxes in the future, but funded with an increase in taxes in the present.

   (c) Permanent decrease in taxes funded by a decrease in future government expenditures

   (d) Decrease in taxes today funded by an increase in taxes in the future.

10. Which of the following could lead to a decrease in employment in equilibrium in the labor market?

    (a) Increase in the interest rate
    (b) Increase in labor productivity
    (c) Increased preference for leisure by consumers
    (d) Improvement in technology

11. How does a decrease in the interest rate affect the market for credit goods versus cash goods?

    (a) Decrease in quantity of credit goods demanded and an increase in the quantity of cash goods demanded.
    (b) Increase in both the quantity of credit goods and cash goods demanded.
    (c) Decrease in both the quantity of credit goods and cash goods demanded.
    (d) Increase in quantity of credit goods demanded and a decrease in the quantity of cash goods demanded.

12. If the Fed decreased the money supply, what would be the impact on the market for money with fully flexible wages and prices?

    (a) Money supply shifts to the right and the aggregate price level increases
    (b) Money demand shifts to the right and the aggregate price level decreases
    (c) Money supply shifts to the left and the aggregate price level decreases
    (d) Money demand shifts to the right and the aggregate price level increases

13. Consider a model of money demand with price level on the vertical axis and quantity of money on the horizontal axis. Which of the following leads to a rightward shift in nominal money demand?

    (a) Decrease in interest rates
    (b) Improvement in financial technology
    (c) Decrease in real GDP
    (d) Increase in the price level

14. What would be the impact of a decrease in money demand on the market for money with fully flexible wages and prices?

    (a) Decrease in price level
    (b) Increase in price level
    (c) Decrease in real interest rate
    (d) Increase in real interest rate

15. During the COVID-19 pandemic in early 2020, many people switched to using credit services instead of using cash. What would be the impact on the market for money and the aggregate price level?

    (a) Money supply shifts right and price level increases.

    (b) Money demand shifts left and price level increases.

    (c) Money demand shifts right and price level decreases.

    (d) Money supply shifts right and price level decreases..

16. Suppose to protect consumers, financial regulations prohibit commerical banks from offering many financial investments beyond low-interest-rate certificates of deposits and savings accounts. What is the impact on the market for money?

    (a) Increase in money demand and a decrease in the aggregate price level.

    (b) Decrease in money demand and a decrease in the aggregate price level.

    (c) Decrease in money supply and a decrease in the aggregate price level.

    (d) Increase in money demand and an increase in the aggregate price level.

17. Which monetary policy leads to a decrease in the aggregate price level?

    (a) Increase in money supply

    (b) Decrease in money supply

    (c) Decrease in money demand

    (d) Increase in money demand

18. Which monetary policy increases employment in a model with sticky wages?

    (a) Decrease in taxes.

    (b) Increase in money supply

    (c) No policy. Changes in money supply only affect price level.

    (d) Decrease in money supply

19. Which monetary policy causes a decrease in real interest rates in a model with sticky wages?

    (a) None. A change in money supply affects only the aggregate price level.

    (b) Decrease in taxes

    (c) Decrease in money supply

    (d) Increase in money supply

20. If labor supply is equal to labor demand, which of the following is true?

    (a) Employment is below its full equilibrium level.

    (b) Real wage is below the equilibrium wage

    (c) Real wage is above the equilibrium wage

    (d) Employment is at the full equilibrium level

21. If real GDP is above potential GDP, which of the following is true?

    (a) The real wage is above the equilibrium wage.

    (b) The real wage is equal to the equilibrium wage.

    (c) The real wage is below the equilibrium wage.

    (d) The production function shifts upward.

22. Monetary policy will have real effects on employment and production if which of the following is true?

    (a) There are sticky wages

    (b) The labor market is always in equilibrium

    (c) Wages and prices are fully flexible

    (d) The wage is at a level where the quantity of labor supplied is equal to the quantity of labor demand.

23. Which of the following would cause a decrease in real wages with sticky nominal wages?

    (a) Increase in nominal wage

    (b) Increase in the price level

    (c) Decrease in the price level

    (d) Decrease in the interest rate

24. Which of the following is true regarding fixed versus flexible wage models and increases in money supply?

    (a) Increases in money supply have no effect on real GDP in neither flexible wage nor sticky wage models

    (b) Increases in money supply have no real effects in flexible wage models and lead to increases in real GDP under sticky wages.

    (c) Increases in money supply have no real effects in sticky wage models and lead to increases in real GDP under flexible wages.

    (d) Increases in money supply lead to increases in real GDP in both flexible wage and sticky wage models

25. Suppose the economy is currently experiencing unemployment and real GDP is below potential. Which of the following monetary policy and modeling framework result in a decrease in unemployment and an increase in real GDP?

    (a) Decrease in money supply in a framework with flexible wages.

    (b) Increase in money supply in a framework with sticky wages.

    (c) Increase in money supply in a framework with flexible wages.

    (d) Decrease in money supply in a framework with sticky wages.

Short-Answer Problem-Solving Questions: 10 points each. Write your answer in the space provided. The instruction to "illustrate" means use a graphical economics model. The instruction to "describe" means to give a short explanation for any changes in the model (i.e. a shifting curve), and describe the final result.

26. Suppose war leads to a destruction of capital stock. Describe and illustrate the impact on general equilibrium outcomes in a model with **perfectly flexible wages.** Describe and illustrate the impact on the real wage, employment, real GDP, interest rate, price level, consumption, and investment.

27. Suppose there is an improvement in consumer confidence, where consumers expect to earn more income in the future. Describe and illustrate the impact on general equilibrium outcomes in a model with **perfectly flexible wages.** Describe and illustrate the impact on the real wage, employment, real GDP, interest rate, price level, consumption, and investment.

28. Suppose the Fed **increases** the money supply. Describe and illustrate the impact on general equilibrium outcomes when **wages are sticky**. Describe and illustrate the impact on the real wage, employment, real GDP, interest rate, price level, consumption, and investment.

29. Suppose there is financial market deregulation that allows commercial banks to offer a variety of financial investment services in addition to checking and savings accounts. Describe and illustrate the impact on general equilibrium outcomes when **wages are sticky**. Describe and illustrate the impact on the real wage, employment, real GDP, interest rate, price level, consumption, and investment.