

Multiple choice: Choose the best response to each prompt.

1. Which of the following is a measure of inflation?
 - (a) Growth rate of real GDP
 - (b) Growth rate of base year
 - (c) Growth rate of nominal GDP
 - (d) Growth rate of the implicit GDP price deflator

2. Which of the following is an expenditure included in the aggregate expenditure approach to calculating GDP?
 - (a) Wages
 - (b) Income earned from producing goods and services
 - (c) Investment
 - (d) Purchase of intermediate goods

3. Which of the following is a measure of the total **quantity** of final goods and services in the economy?
 - (a) Both real and nominal GDP
 - (b) Real GDP
 - (c) Nominal GDP
 - (d) Inflation

4. Which of the following is an example of fixed investment?
 - (a) A business producing and stocking up on inventory to sell later
 - (b) Building a new factory to produce shoes
 - (c) Buying an existing home
 - (d) An individual consumer buying a new car

5. Which of the following is a flow variable?
 - (a) Wealth
 - (b) Debt
 - (c) Capital stock
 - (d) Investment

6. Suppose a consumer saves part of their income and puts it in a financial asset to earn interest. What macroeconomic variable does this represent?
- (a) Savings and investment, they are the same thing
 - (b) Savings
 - (c) Capital stock
 - (d) Investment
7. Which of the following people are considered unemployed?
- (a) Someone who is able to work, looking for work, and not employed.
 - (b) Any person not currently employed.
 - (c) Anyone not looking for work.
 - (d) Anyone in the working-age population not working.
8. Which of the following is a marginally attached worker?
- (a) Someone who was fired and is looking for another job but having difficulty finding one because of their poor work record
 - (b) Someone who was laid off, wants a another job, but hasn't started looking for a job yet.
 - (c) Someone who was laid off and decided to go back to school instead
 - (d) Someone who lost their job and is actively seeking another job.
9. Suppose a natural disaster causes a destruction of capital stock, making workers less productive. What will be the impact on the market for labor?
- (a) Decrease in labor demand and a decrease in equilibrium wage
 - (b) Decrease in labor supply and increase in equilibrium wage
 - (c) Increase in labor demand and an increase in equilibrium wage
 - (d) Decrease in labor demand and no change in equilibrium wage
10. Suppose consumer confidence drops which leads to a decrease in consumer demand for final goods and services. What will be the impact on the aggregate labor market?
- (a) Increase in labor supply
 - (b) Increase in labor demand
 - (c) Decrease in labor demand
 - (d) Decrease in labor supply

11. Which of the following characterizes unemployment in the market for labor?
- (a) A disequilibrium in the labor market where the market wage is above the equilibrium wage, causing a labor market surplus
 - (b) A disequilibrium in the labor market where the market wage is below the equilibrium wage, causing a labor market surplus
 - (c) A disequilibrium in the labor market where the market wage is below the equilibrium wage, causing a labor market shortage
 - (d) A disequilibrium in the labor market where the market wage is above the equilibrium wage, causing a labor market shortage
12. Suppose there is an increase in the global price for most types of energy. Energy is an input into the production of almost all goods and services. All other things remaining equal, what will be the impact on the aggregate labor market?
- (a) Increase in labor demand
 - (b) Increase in labor supply
 - (c) Decrease in labor supply
 - (d) Decrease in labor demand
13. Suppose there is an increase in demand for college education, with more highschool graduates deciding to go to college full time rather than work. What would be the immediate effect on the labor market?
- (a) Increase in labor supply
 - (b) Decrease in labor demand
 - (c) Decrease in labor supply
 - (d) Increase in labor demand
14. Suppose there is a drop in labor demand, but no immediate change in the market wage. Which of the following may result?
- (a) An increase in unemployment
 - (b) A decrease in worker shortage
 - (c) An increase in worker shortage
 - (d) A decrease in unemployment

15. Suppose there is an economy-wide increase in labor productivity. What is the impact on the labor market equilibrium?
- (a) Increase in employment and a decrease in wage
 - (b) Decrease in employment and decrease in wage
 - (c) Decrease in employment and an increase in wage
 - (d) Increase in employment and an increase in wage
16. Suppose businesses expect an increase in profitability in the future. Which of the following would occur in the loanable funds market?
- (a) A leftward shift in the demand for investment
 - (b) A leftward shift in the supply of savings
 - (c) A rightward shift in the demand for investment
 - (d) A rightward shift in the supply of savings
17. Which of the following is the definition of 'investment' used in a macroeconomics context?
- (a) The building or purchase of physical goods that will be used in the production of other goods and services.
 - (b) Savings by individuals into stocks and bonds.
 - (c) Purchases of stocks and bonds by businesses.
 - (d) Sales of bonds by governments.
18. Which of the following is a type of savings and a component of saving supply?
- (a) Government spending
 - (b) Investment in capital by consumers
 - (c) Investment in capital by businesses
 - (d) Consumer savings
19. Which of the following would lead to a rightward shift in saving supply?
- (a) A change in government policies that lead to an increase in tax revenue and a decrease in government expenditures
 - (b) A change in government trade policy that leads to higher exports and lower imports
 - (c) An increase in net exports.
 - (d) An increase in government borrowing

20. Suppose consumer confidence improves, and as a result, consumer spending increases, leading to an increase in consumer borrowing. Which of the following would occur in the market for loanable funds?
- (a) Decrease in investment demand
 - (b) Increase in investment demand
 - (c) Increase in savings supply
 - (d) Decrease in savings supply
21. Suppose an improvement in consumer confidence leads to an increase in consumer spending. Which of the following would occur in the market for loanable funds?
- (a) Investment demand shifts to the right and interest rate decreases
 - (b) Saving supply shifts to the right and interest rate increases
 - (c) Investment demand shifts to the right and interest rate increases
 - (d) Saving supply shifts to the right and interest rate decreases
22. Suppose global supply chain disruptions cause the production of goods and services to be more costly and less efficient. Which of the following would happen in the markets for labor and loanable funds?
- (a) Labor demand would shift to the right, and investment demand would shift to the right.
 - (b) Labor demand would shift to the left, and investment demand would shift to the right.
 - (c) Labor demand would shift to the right, and investment demand would shift to the left.
 - (d) Labor demand would shift to the left, and investment demand would shift to the left.
23. Suppose the increases taxes and leaves government expenditures unchanged. What is the impact on the market for loanable funds?
- (a) Decrease in saving supply and an increase in equilibrium interest rates
 - (b) Increase in investment demand and an increase in equilibrium interest rates
 - (c) Increase in investment demand and a decrease in equilibrium interest rates
 - (d) Increase in saving supply and a decrease in equilibrium interest rates
24. Suppose consumers experience a decrease in income, leading both to a decrease in savings and a decrease in income. What is the impact on the market for loanable funds?
- (a) Increase in saving supply and a decrease in investment demand
 - (b) Decrease in saving supply and a decrease in investment demand
 - (c) Decrease in saving supply and no change in investment demand
 - (d) Decrease in saving supply and an increase in investment demand

25. Which of the following leads to a decrease in interest rates and a decrease in investment in equilibrium?

- (a) An improvement in consumer confidence leading to an increase in consumer borrowing
- (b) A drop in business confidence, leading to a reduction in investment in capital
- (c) An improvement in businesses outlook on future profitability
- (d) A drop in consumer confidence, leading to an increase in precautionary saving

Short-answer and problem-solving questions: Provide written answers to each question in the space provided.

26. (5 points) Suppose an economy produces only smartphones and record players and experienced the following quantities and prices:

Smartphones in 2019: Price = \$150, Qty = 10

Record Players in 2019: Price = \$100 Qty = 12

Smartphones in 2020: Price = \$175, Qty = 11

Record Players in 2020: Price = \$120 Qty = 14

Use 2019 as a base year and compute the real GDP for both 2019 and 2020. By what percentage did real GDP grow?

27. (5 points) Suppose an economy produces only apples and donuts and experienced the following quantities and prices:

Apples in 2019: Price = \$1.50, Qty = 15

Donuts in 2019: Price = \$2.00 Qty = 10

Apples in 2020: Price = \$1.75, Qty = 18

Donuts in 2020: Price = \$2.50 Qty = 12

Use 2019 as a base year and compute the inflation rate from 2019-2020.

28. (5 points) Suppose an economy has a working-age population with the following characteristics:
- 40 retired
 - 120 employed
 - 25 people not working and looking for a job
 - 15 people not working, going to school full time instead of looking for work
 - 10 people recently laid off, but not looking for work because they think no jobs are available.

What is the labor force participation rate?

29. (5 points) Suppose an economy has a working-age population with the following characteristics:
- 30 retired
 - 110 employed
 - 20 people not working and looking for a job
 - 15 people not working, going to school full time instead of looking for work
 - 10 people recently laid off, but not looking for work because they think no jobs are available.

What is the unemployment rate?

30. (5 points) In 2008-2009, birth rates in the United States declined and have not recovered since. Describe and illustrate the impact on the labor market in 2026 (18 years later) when fewer people who are age 18 come to participate in the labor force.
31. (5 points) Suppose there is there is an increase in global energy costs which makes it more expensive to run factories. Describe and illustrate the impact on equilibrium wages and employment in the manufacturing industry.
32. (5 points) Suppose there is a decrease in stock market values which results in a decrease of wealth for consumers, leading both to an increase in desire for people near retirement age to work longer and a decrease in demand for final goods and services.

33. (5 points) Suppose businesses expect demand for their products and services to increase in the near future. Describe and illustrate the impact on equilibrium investment and interest rate.
34. (5 points) Suppose government cuts taxes but makes no changes to government expenditures. Suppose the tax policy has a negligible change on people's spending and savings decisions. Describe and illustrate the impact on the equilibrium level of investment and the interest rate.
35. (5 points) Suppose a government increases its spending on infrastructure such as roads, electrical lines, and communications infrastructure, all of which make business more productive. Suppose the government does this while keeping tax revenues the same. Describe and illustrate the impact on equilibrium investment and interest rate.