

Multiple choice: Choose the best response to each prompt.

1. Suppose when consumers receive an additional \$100 of income, on average they increase their spending by \$75. What is the marginal propensity to save?
 - (a) $MPS = 100$
 - (b) $MPS = \$25$
 - (c) $MPS = 0.75$
 - (d) $MPS = 0.25$

2. When the marginal propensity to save decreases, what happens to the expenditure multiplier?
 - (a) The impact on the multiplier cannot be determined
 - (b) The expenditure multiplier stays the same
 - (c) The expenditure multiplier increases
 - (d) The expenditure multiplier decreases

3. If consumer confidence drops, what would be the impact on consumer spending decisions today?
 - (a) Consumers increase spending today until the future when income decreases
 - (b) Consumers decrease spending today
 - (c) The change in consumer spending cannot be determined
 - (d) There is no change in spending today

4. Suppose an increase in housing prices leads to an increase in consumer wealth. What impact will this have on consumption decisions?
 - (a) Decrease in consumer spending
 - (b) An increase in consumer spending, but only if there is also an increase in income
 - (c) There is no change in consumer spending as a result of a change in home values
 - (d) Increase in consumer spending

5. Suppose there is an increase in the interest rate. What is the impact on investment spending plans?
- (a) Investment spending stays the same
 - (b) Increase in investment
 - (c) Investment is indeterminate.
 - (d) Decrease in investment
6. Suppose businesses expect a recession in the near future. What will be the impact on expenditure demand?
- (a) Decrease in investment spending
 - (b) Decrease in consumption spending
 - (c) Increase in consumption spending
 - (d) Increase in investment spending
7. Suppose there is an unexpected decrease in business inventories. What is the impact on inventory investment spending?
- (a) Decrease in inventory investment spending
 - (b) No change in investment
 - (c) Decrease in spending on capital stock
 - (d) Increase in inventory investment spending
8. Suppose when consumers get a \$150 increase in income, their consumption spending increases by \$110 and there is no change in imports. What is the expenditure multiplier?
- (a) 1.36
 - (b) 73.3%
 - (c) 3.75
 - (d) 0.267
9. How does an increase in government spending on infrastructure affect the aggregate demand curve?
- (a) An increase in government spending causes a movement along the aggregate demand curve (no shift), leading to an increase in total demand for final goods and services.
 - (b) An increase in infrastructure spending leads to an improvement in capital productivity, which causes the productivity curve to shift upward.
 - (c) An increase in infrastructure spending only affects aggregate demand if it also leads to a change in government borrowing.
 - (d) An increase in government spending causes the aggregate demand curve to shift to the right.

10. If the U.S. dollar appreciates relative to its major trading partners, what will be the impact on the aggregate demand curve?
- (a) The appreciation will lead to an increase in interest rates, which causes the aggregate demand to shift to the left.
 - (b) Exports will decrease and imports will increase, both leading to a decrease / leftward shift in aggregate demand.
 - (c) Exports will increase and imports will decrease, both leading to an increase / rightward shift in aggregate demand.
 - (d) The change in exports will be offset by the change in imports, leading to no change in the aggregate demand curve.
11. Suppose the government decreases the sales tax rate. What would be the impact on aggregate demand?
- (a) A decrease in the sales tax reduces government borrowing, shifting aggregate demand to the left.
 - (b) A decrease in the sales tax makes consumption less expensive, causing aggregate demand to shift to the right.
 - (c) A decrease in sales tax increases government saving, shifting the aggregate demand to the right.
 - (d) This results in a movement (not a shift) along the aggregate demand curve to the right.
12. Which aggregate supply curve has a positive slope (i.e upward sloping) with respect to the aggregate price level?
- (a) Neither the short-run nor the long-run aggregate supply curves are upward sloping.
 - (b) The short-run aggregate supply curve, only.
 - (c) The long-run aggregate supply curve, only.
 - (d) Both the short-run and long-run aggregate supply curves are upward sloping.
13. Suppose there is a decrease in the interest rate. What is the impact on the market for final goods and services?
- (a) Aggregate demand shifts to the left, leading to a decrease in real GDP and a decrease in the price level in the short run.
 - (b) Aggregate demand shifts to the right, leading to an increase in real GDP and an increase in the price level in the short run.
 - (c) Aggregate supply shifts to the left, leading to a decrease in real GDP and an increase in the price level in the short run.
 - (d) Aggregate supply shifts to the right, leading to an increase in real GDP and a decrease in the price level in the short run.

14. Which of the following would cause the aggregate demand to shift to the right?
- (a) An increase in taxes, leading to a decrease in government borrowing.
 - (b) A decrease in demand for exports.
 - (c) A decrease in the aggregate price level.
 - (d) An improvement in consumer confidence, leading to an increase in consumption demand.
15. Which of the following would cause the short-run aggregate supply to shift to the left?
- (a) A decrease in demand for imported goods.
 - (b) An increase in the cost of hiring workers.
 - (c) A decrease in demand for consumption.
 - (d) A decrease in businesses purchases of capital equipment.
16. Suppose there is a decrease in global energy prices which makes it less costly to produce goods and services. What is the short-run impact on the market for final goods and services?
- (a) Decrease in the aggregate price level and an increase in real GDP.
 - (b) Decrease in the aggregate price level and a decrease in real GDP.
 - (c) Increase in the aggregate price level and an increase in real GDP.
 - (d) Increase in the aggregate price level and a decrease in real GDP.
17. Which of the following can lead to an increase in real GDP and an increase in the aggregate price level in the short run?
- (a) A rightward shift in aggregate demand
 - (b) A leftward shift in aggregate demand
 - (c) A leftward shift in aggregate supply
 - (d) A rightward shift in aggregate supply
18. What is the primary purpose of the Federal Reserve in setting interest rates?
- (a) To ensure equal income distribution
 - (b) To regulate economic growth and inflation
 - (c) To control the stock market performance
 - (d) To influence international trade balances

19. What is one consequence of lowering the interest rate on reserve balances (IORB)?
- (a) Banks hold more reserves to earn higher returns
 - (b) Inflation is immediately eliminated
 - (c) Banks are incentivized to lend more, reducing their reserves
 - (d) The Federal Reserve's operating budget increases
20. A bank needs to borrow money overnight from another bank to meet its reserve requirements. Which interest rate applies?
- (a) Discount Rate
 - (b) Banks' Interest Rates on Loans
 - (c) Interest Rate on Reserve Balances
 - (d) Federal Funds Rate
21. What is the primary role of the Federal Reserve District Banks?
- (a) To manage the federal budget
 - (b) To oversee global trade policies
 - (c) To implement monetary policy and supervise member banks in their region
 - (d) To directly set interest rates for consumers
22. What type of organization are the Federal Reserve District Banks classified as?
- (a) Nonprofit, private institutions
 - (b) Government agencies
 - (c) Publicly traded companies
 - (d) For-profit corporations
23. Suppose there is an increase in the interest rate. What is the impact on the market for final goods and services?
- (a) Consumption demand and investment demand both decrease, causing the aggregate supply curve to shift to the left.
 - (b) Consumption demand and investment demand both decrease, causing the aggregate demand curve to shift to the left.
 - (c) There is no effect on the market for final goods and services
 - (d) Consumption demand and investment demand both increase, causing the AD curve to shift to the right.

24. If the central bank wanted to stimulate the economy in order to increase real GDP, which policy should it take?
- (a) Decrease the discount rate and the interest rate on reserve balances
 - (b) Increase the discount rate, but decrease the interest rate on reserve balances
 - (c) Decrease the discount rate, but increase the interest rate on reserve balances
 - (d) Increase the discount rate and the interest rate on reserve balances
25. Which of the following monetary policies leads to an increase in real GDP and a decrease in the price level?
- (a) Increase in interest rates
 - (b) Decrease in interest rates
 - (c) No monetary policy can achieve this.
 - (d) Decrease in taxes

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

26. (5 points) Suppose past evidence revealed that when consumers received an \$800 tax rebate, they increased their spending by \$650, including \$100 on imported goods. Suppose the government recently passed a stimulus package bill that increases government spending by \$420 billion. Compute the expected short-run impact on real GDP.
27. (5 points) Suppose past evidence revealed that when consumers received an \$800 tax rebate, they increased their spending by \$650, including \$100 on imported goods. The country is currently in a recession. Real GDP is \$14 trillion and potential GDP is estimated to be \$15.5 trillion. If the government decided to increase government spending to bring the economy out of its recessionary gap, how much should government spending be increased?
28. (5 points) Suppose an improvement in business outlook leads to a \$210 billion increase in investment. Suppose also that a past \$600 tax rebate revealed that consumers responded by increasing their spending by \$400 and increased their import spending by \$50. Compute the expected short-run impact in real GDP in the United States.

29. (5 points) Suppose there an increase in demand from Europe for U.S. goods and services. Describe and illustrate the short-run impact on real GDP, price level, employment, and wages.
30. (5 points) Suppose COVID-related shutdowns result in a temporary closure of manufacturing facilities. Describe and illustrate the short-run impact on real GDP, price level, employment, and wages.
31. (5 points) Suppose the economy is initially at the long-run equilibrium, where short-run equilibrium GDP is equal to potential GDP, when there is an improvement in consumer confidence. Describe and illustrate both the short-run and long-run effects on real GDP, price level, employment, and wages.

32. (5 points) Suppose the economy is initially in a short-run equilibrium where GDP is below potential GDP (i.e. a recessionary gap). Illustrate this situation in an aggregate demand/aggregate supply model and a labor market model. Suggest a tax policy for workers/consumers to fix the problem, and describe and illustrate the impact on real GDP, price level, wage, and employment.
33. (5 points) Suppose the economy is initially in a short-run equilibrium where GDP is below potential GDP (i.e., a recessionary gap). Illustrate this situation in an aggregate demand/aggregate supply model and a labor market model. Suggest a tax policy on businesses to address the problem, and describe and illustrate the impact on real GDP, price level, wage, and employment.
34. (5 points) Suppose the economy is at full employment when the Federal Reserve decreases the interest rate on reserve balances. Describe and illustrate the short-run effects on real GDP, price level, employment, and wages.

35. (5 points) Suppose the economy is initially in a short-run equilibrium where GDP is above potential GDP and the economy is experiencing a high level of inflation (i.e., an expansionary gap or inflationary gap). Illustrate this situation in an aggregate demand/aggregate supply model and a labor market model. Suggest a monetary policy to bring down inflation, and describe and illustrate the short-run effects on real GDP, price level, employment, and wages.