

MACROECONOMICS EXAM REVIEW

CHAPTERS 5 THROUGH 10

Key Terms and Concepts to Know

CHAPTER 5 – FUNDAMENTALS OF MACROECONOMICS

I. The National Economy:

Economy: the structure of economic life, or economic activity, in a community, a region, a country, a group of countries, or the world.

GDP (gross domestic product): The market value of all final goods and services produced in the U.S. during a given period, usually a year.

A. What's Special about the National Economy? Each country has its own "rules of the game" (laws, regulations, customs, manners, and conventions).

B. The Human Body and the Economy: The economy, like the body:

- consists of many parts, each performing particular functions yet linked,
- is continually renewing itself
- involves circular flow through the system.
- Flows and Stock Variables:
 - **Flow:** A measure of an amount per unit of time.
 - **Stock:** Amount measured at particular point in time.

II. Economic Fluctuations and Growth

▪ **Economic fluctuations (business cycles):** The rise and fall of economic activity relative to the long-term growth trend of the economy.

A. U.S. Economic Fluctuations: Two phases: periods of expansion and contraction

- **Depression:** A severe contraction or reduction in the nation's total production lasting more than a year and accompanied by high unemployment.
- **Recession:** A mild contraction, a decline in total output traditionally defined as lasting at least two consecutive quarters.
- **Periods of expansion:** Begin when economic activity starts to increase and continues until the economy reaches a peak.
- **Inflation:** An increase in the economy's average price level.

B. Leading Economic Indicators: Foreshadow a turning point in economic activity

- **Coincident Economic Indicators:** Reflect peaks and troughs as they occur.
- **Lagging Economic Indicators:** Follow or trail changes in economic activity.

III. Aggregate Demand and Aggregate Supply

A. Aggregate Output and the Price Level

- **Aggregate output:** Total amount of final goods and services produced in the economy during a given period, real GDP.
- **Aggregate Demand:** The relationship between the economy's price level and aggregate output demanded, with other things constant.
- **Price level:** The average price of aggregate output (CPI or GDP price index.)

B. Aggregate Demand Curve:

Shows the relationship between the economy's price level and real GDP demanded

C. Aggregate Supply Curve:

Shows how much producers in an economy are willing and able to supply at each price level. Factors held constant along an aggregate supply curve:

- Resource prices
- State of technology
- Rules of the game that provide production incentives

D. Equilibrium: Determined by the intersection of the aggregate supply and the aggregate demand curves.

IV. A Brief History of the U.S. Economy

A. The Great Depression and Before:

- Due to the 1929 stock market crash, aggregate demand declined so severely that one of the deepest contractions of the economy was created. Prior to that time, macroeconomic policy was based on the "laissez-faire" philosophy of Adam Smith.

B. The Age of Keynes: After the Great Depression to the Early 1970s

- Demand-side economics: Focused on how changes in aggregate demand could promote full employment.

C. Stagflation: 1973 to 1980

- Stagflation: A contraction in the economy's aggregate output, along with inflation, or a rise in the economy's price level.

D. Relatively Normal Times: 1980 to 2007

- Supply-side economics: Theorizes that lowering federal tax rates would increase after-tax wages, which would provide an incentive to increase the supply of labor and other resources.
- Output and employment grew nicely during the 1990s. The expanding economy increased federal revenues enough to create a federal budget surplus by the end of the decade. After achieving the longest expansion on record, the U.S. economy slipped into recession aggravated by the terrorist attacks of September 2001. The subsequent expansion lasted until 2007.

E. The Recession of 2007-2009 and Beyond

- The economy went in recession in early 2008 because of falling home prices and rising foreclosure rates. The collapse of a Wall Street bank in September 2008 panicked financial markets around the world, cutting investment and consumption. Job losses were the worst since the Great Depression.
- Massive federal programs aimed at stabilizing the economy resulted in gigantic federal deficits. Economic growth returned in the second half of 2009.

CHAPTER 6 – TRACKING THE U.S. ECONOMY

I. The Product of a Nation:

Measured historically by the detailed national income accounting system developed by Kuznets in the 1930s

A. National Income Accounts

- **Gross domestic product (GDP):** Measures the market value of all final goods and services produced during a year by resources located in the United States, regardless of who owns the resources. GDP can be measured by the expenditure approach or the income approach.
- **Final goods and services:** Sold to the final, or end, user.
- **Intermediate goods and services:** Purchased for additional processing and resale.

B. GDP Based on the Expenditure Approach

- **Consumption (C):** Personal consumption expenditures by households for services, durable, and nondurable goods.
- **Investment (I):** Gross private domestic investment; spending on new capital goods and on net additions to inventories.
- **Government Purchases (G):** Government consumption and gross investments; includes government spending for goods and services.
- **Net exports (X-M):** Value of U.S. exports minus the value of U.S. imports.
- **Aggregate expenditure:** $C + I + G + (X - M) = \text{Aggregate Expenditure} = \text{GDP}$

C. GDP Based on the Income Approach:

- The Income Approach is the sum of wages, interest, rent and profit arising from production. Avoids double counting by either including only the market value of the good or service or summing the value added at each stage of production. (Aggregate expenditure = GDP = Aggregate income)

II. Circular Flow of Income and Expenditure:

- The main stream flows clockwise first as income from firms to households (the upper half) and then as spending from households back to firms (the lower half). For each flow of money, there is an equal and opposite flow of goods or resources

A. Income Half of the Circular Flow

- The production of aggregate output equals aggregate income. $GDP = \text{Aggregate income}$ assuming no depreciation and no retained earnings.
- **Disposable income** (DI) is take-home pay. $DI = \text{Aggregate income} - (\text{Taxes} + \text{Transfers})$
- **Net Taxes** (NT) equals taxes – transfer payments.
- **Aggregate income:** $GDP = \text{Aggregate income} = DI + NT$

B. Expenditure Half of the Circular Flow: $DI = C + S$

- Households with disposable income must use it to consume or save.
- $C + I + G + (X - M) = \text{Aggregate expenditure} = GDP$

C. Injections Equal Leakages

- **Accounting Identity 1: Aggregate expenditure = Aggregate income**
 $C + I + G + X - M = DI + NT$
 $C + I + G + X - M = C + S + NT$
- **Accounting Identity 2: Injections = Leakages**
 $I + G + X = S + NT + M$

II. Limitations of National Income Accounting

A. Some Production Is Not Included in GDP:

- Do-it-yourself production
- Production in the underground economy.
- Some production that does not involve market exchange is included in GDP:
 - Imputed rental income that homeowners receive from home ownership.
 - Imputed value of wages paid in kind.
 - Imputed value of food produced on a farm for that farm family's own consumption.

B. Leisure, Quality, and Variety: GDP does not measure changes in the availability of leisure time, the quality of products, or in the availability of new products.

C. What's Gross About Gross Domestic Product?

- GDP is called "gross" because it does not take into account the depreciation of capital.
- **Depreciation:** The value of capital stock that is used up or becomes obsolete in the production process.
- Net Domestic Product (NDP) = $GDP - \text{depreciation}$
- **Gross investment:** The value of all investment spending during a year.
- **Net Investment:** Gross investment minus depreciation.

D. GDP Does Not Reflect All Costs: GDP ignores negative externalities and the depletion of natural resources

E. GDP and Economic Welfare: Some economists question whether GDP is a true measure of economic welfare. It ignores the type or composition of what is purchased so cigarettes is considered equal to baby formula.

IV. Accounting for Price Changes:

To make meaningful comparisons of GDP across years, nominal GDP must be deflated. This allows the focus to be on real changes in production.

- **Nominal GDP** (current \$ GDP): Based on prices prevailing when production occurs.
 - **Real GDP**: Measured in terms of the goods and services produced.
- A. Price Indexes:** Used to compare the value of some variable in a particular year to its value in a base year.
 - B. Consumer Price Index:** Measures changes over time in the cost of buying a “market basket” of goods and services purchased by a typical family.
 - C. Problems with the CPI:**
By failing to reflect new products and improved quality, estimates of the possibilities of substitution, and shifts to discount outlets, the CPI is overstated.
 - D. The GDP Price Index:**
(Nominal GDP/ Real GDP) × by 100 measures average price of all goods and services produced in the economy.

CHAPTER 7 – UNEMPLOYMENT AND INFLATION

I. Unemployment: Its Measure and Sources

A. Measuring Unemployment

- **Labor force:** Those in the adult population who are either working or looking for work.
- **Unemployment rate:** The number unemployed divided by the number in the labor force.
- **Discouraged workers:** People who have dropped out of the labor force.
- **Long-term unemployed:** those who are unemployed for 27 weeks or longer.

B. Sources of Unemployment

- **Frictional Unemployment:** Reflects the time required to bring together employers and job seekers.
- **Seasonal Unemployment:** Caused by seasonal changes in labor demand during the year.
- **Structural Unemployment:** Arises because of a mismatch of skills or geographic location.
- **Cyclical Unemployment:** Fluctuates with the business cycle, increasing during recessions and decreasing during expansions.

II. Other Employment Issues:

A. The Meaning of Full Employment:

There is no cyclical unemployment, but unemployment is not zero. There will still be some frictional, structural, and seasonal unemployment in an economy considered to be at full employment.

B. Unemployment Compensation

- Provides a safety net for the unemployed and is on average 50% of person's take home pay
- May reduce the urgency of finding work, thereby increasing the average duration of unemployment and the unemployment rate,
- Allows for a higher-quality job search.

C. Problems with Official Unemployment Figures:

- Ignore discouraged workers and those who are underemployed, causing unemployment rates to be underestimated.
- Unemployment benefits and most welfare programs require recipients to seek employment or at least go through the motions even if they do not want a job. This overestimates unemployment.
- Additionally, those in the underground economy may not admit to having a job because they are breaking the law, resulting again in an overestimate of unemployment.

III. Inflation: Its Measure and Sources

A sustained increase in the economy's average price level.

- **Hyperinflation:** Extremely high inflation.
- **Deflation:** A sustained decrease in the average price level.
- **Disinflation:** A reduction in the rate of inflation.

A. Two Sources of Inflation

- **Demand-pull:** A rising aggregate demand pulls up the price level.
- **Cost-push:** Inflation caused by a decrease in aggregate supply. Therefore, increases in production costs will push up the price level.

IV. Effects of Inflation

A. Anticipated Versus Unanticipated Inflation

- **Anticipated Inflation:** Is largely neutral in its effects on real GDP.
- **Unanticipated Inflation:** Arbitrarily creates economic winners (debtors and those on fixed incomes) and losers (creditors).

B. The Transaction Costs of Variable Inflation:

- Increase as inflation becomes more unpredictable.

C. Inflation Obscures Relative Price Changes: During periods of volatile inflation, there is greater uncertainty about the price of one good relative to another.

D. Inflation across Metropolitan Areas: Inflation rates differ across regions mostly because of differences in housing prices.

E. Inflation and Interest Rates

- **Interest:** The dollar amount paid by borrowers to lenders.
- **Supply of loanable funds:** Slopes upward, represents the amount people are willing to lend.
- **Demand for loanable funds:** Slopes downward, represents the amount demanded to purchase goods or finance deficits.

- **Nominal interest rate:** Interest in terms of current dollars paid. This is the rate that is seen on loan agreements and is discussed in the media.
- **Real interest rate:** Is known only after the fact; that is, after inflation occurs.
 - Equals the nominal interest rate minus the rate of inflation (CPI).
 - The higher the expected inflation, the higher the nominal rate of interest.

F. Why Is Inflation Unpopular?

Unanticipated inflation:

- Arbitrarily redistributes income and wealth from one group to another;
- Reduces the ability to make long-term plans;
- Forces buyers and sellers to focus more on money and prices.
- **COLA** is a cost of living adjustment, an increase in payments or wages that is tied to the increase in the price level.

CHAPTER 8 – PRODUCTIVITY AND GROWTH

I. Theory of Productivity and Growth

A. Growth and the Production Possibilities Frontier

Outward shift in the PPF caused by:

- greater availability of resources
- improvement in the quality of resources
- technological changes that make better use of resources
- improvements in the rules of the game that enhance production

B. What Is Productivity?

Ratio of total output to a specific measure of input.

C. Labor Productivity: Output per unit of labor, measured as real GDP divided by the hours of labor used to produce the output.

D. Per-Worker Production Function

- Relationship between the amount of capital per worker and the output per worker.
- Slope of the curve (per-worker production function): Positive because an increase in capital per worker helps each worker produce more output. The diminishing slope reflects the law of diminishing marginal returns from capital: As the quantity of capital increases, the output per worker increases at a diminishing rate.
- Capital deepening is an increase in the quantity of capital per worker.

E. Technological Change: Usually improves the quality of capital. As technological breakthroughs become embodied in new capital, resources are combined more efficiently, increasing total output.

F. Rules of the Game: the formal and informal institutions that promote economic activity.

II. Productivity and Growth in Practice

- The U.S. produces about 155 times the per capita output of the world's poorest countries
- Industrial market countries (economically advanced capitalist countries) versus developing countries (lower standard of living due to less human and physical capital)

A. Education and Economic Development

B. U.S. Labor Productivity

Small differences in productivity can make huge differences in the economy's ability to produce and therefore, on the standard of living.

C. Slowdown and Rebound in Productivity Growth

Productivity growth in the U.S. rebounded from 1974-1982 and, from 1983-1995 averaged 1.8%. From 1996 to 2010, productivity growth averaged 2.7%. The growth during this time is partly attributed to the information revolution powered by the computer chip.

D. Output per Capita:

- Real GDP divided by population indicates how much an economy produces on average per resident.
- Output per capita increases if:
 - Labor productivity increases for a given worker-population ratio
 - Worker-population ratio increases for a given labor productivity
 - Both worker-population ratio and labor productivity increase

E. International Comparisons:

- U.S. is the top country, with a per capita income of 21% above second-ranked Canada
- U.S. has average growth in output per capita of 1.8% per year, third among seven major economies.

III. Other Issues of Technology and Growth

A. Does Technological Change Lead to Unemployment?

- Some fear that if technological change reduces the labor needed to produce a given amount of output, it can lead to unemployment in some industries.
- But technological change can make products more affordable.
- Change may displace workers in short run, but long-term benefits include higher real incomes and more leisure.

B. Research and Development

Improvements in technology arise from scientific discovery.

- **Basic Research:** The search for knowledge without regard for how that knowledge will be used?
- **Applied Research:** Seeks to answer particular questions or apply scientific discoveries to the development of specific products.
- **Expenditures for Research and Development:** R&D spending as a percentage of GDP

C. Industrial Policy:

The idea that government—using taxes, subsidies, regulations, and coordination of the private sector—can help nurture industries and technologies of the future to give domestic industries an advantage over foreign competitors..

CHAPTER 9- AGGREGATE EXPENDITURE AND DEMAND

I. Consumption

A. The Consumption Function

- Consumption is a function of (depends on) disposable income.
- Consumption is the dependent variable and disposable income is the independent variable.
- A positive (direct) relationship exists between levels of disposable income and the amount spent on consumption.

B. Marginal Propensities to Consume and to Save

- **Marginal propensity to consume:** Fraction of additional income that is spent.
- **Marginal propensity to save:** Fraction of additional income that is saved
- MPC = The change in consumption/the change in income.
- MPS = The change in saving/the change in income.
- Disposable income is either consumed or saved; thus, $MPC + MPS = 1$.

C. MPC, MPS, and the Slope of the Consumption and Savings Functions

- The MPC is measured graphically by the slope of the consumption function.
- The MPS is measured graphically by the slope of the saving function.

II. Nonincome Determinants of Consumption Can Cause a shift in the consumption function

A. Net Wealth and Consumption

- **Net wealth:** The value of all assets that each household owns minus any liabilities.
- A change in net wealth shifts the consumption and saving functions in opposite directions.
- A decrease in net wealth:
 - Makes consumers less inclined to spend and more inclined to save.
 - Causes the consumption function to shift down and the saving function to shift up.
- An increase in net wealth:
 - Encourages consumers to save less and spend more at each level of income.
 - Causes the consumption function to shift upward and the saving function to shift downward.
 - A change in disposable income is reflected in movement along a given consumption function.

B. The Price Level

- An increase in the price level:

- Causes a downward shift of the consumption function.
- Reduces the purchasing power of money holdings.
- A decrease in the price level:
 - Causes an upward shift of the consumption function.
 - Increases the purchasing power of money holdings.

C. The Interest Rate: Reward paid to savers to defer consumption

- A higher interest rate shifts the consumption function downward.
- A lower interest rate shifts the consumption function upward.

D. Consumer Expectations: Influence economic behavior in a number of ways.

III. Other Spending Components

A. Investment: Gross private domestic investment is spending on:

- New factories, office buildings, malls, and new equipment
- New housing
- Net increases to inventories
- Firms buy new capital goods only if they expect this investment to yield a higher return than other possible uses of their funds.
- Investment Demand Curve
- Downward-sloping demand curve for investment: an inverse relationship between quantity of investment demanded and market interest rate.
 - More is invested when the opportunity cost of borrowing is lower.
 - Business expectations about the economy are held constant along the investment demand curve.
- Investment and Income:
 - Investment depends more on interest rates and on business expectations than on the prevailing income level. Investment is based more on expected profit than on current income.
 - Simplest investment function assumes that investment is autonomous with respect to disposable income.

B. Government

- Government Spending: Federal, state, and local government purchases of goods and services.
- Government Purchase Function: Assumes that government-spending decisions are autonomous, independent, of the level of income.
- An increase in government purchases would shift the government purchase function upward.
- A decrease in government purchases would shift the government purchase function downward.

C. Net Exports: The value of exports minus imports

Net Exports and Income: Net exports decline as U.S. income increases because:

- U.S. exports are relatively insensitive to the level of U.S. income but depend on foreign incomes.

IV. Aggregate Expenditure and Income:

Each dollar of spending translates directly into a dollar of income. We continue to assume no capital depreciation, no business saving and net exports are assumed to be autonomous.

A. The Components of Aggregate Expenditure: $AE = C + I + G + (X - M)$

- The aggregate expenditure line shows how much households, firms, governments, and the rest of the world plan to spend on U.S. output at each level of real GDP.
- The only spending component that varies with real GDP is consumption.

B. Real GDP Demanded: The relationship between real GDP and aggregate expenditure is expressed as an aggregate expenditure line.

- Aggregate expenditure line: $C + I + G + (X - M)$.
- Real GDP: The value of aggregate output or the aggregate income generated by that output.
- Income-expenditure model: Real GDP is measured on the horizontal axis and aggregate expenditure is measured on the vertical axis. The 45-degree line identifies all points where spending equals real GDP.

C. What If Spending Exceeds Real GDP? For a given price level, there is only one point along the aggregate expenditure line at which spending equals real GDP. Where aggregate expenditure exceeds GDP, inventories will fall, signaling the need to increase production.

D. What If Real GDP Exceeds Spending? Where GDP exceeds aggregate expenditure, inventories will rise, signaling the need to decrease production.

V. The Simple Spending Multiplier

A. An Increase in Spending: As long as spending exceeds output, production will yield more income, which will generate more spending.

B. Using the Simple Spending Multiplier: The factor by which real GDP demanded changes for a given initial change in spending.

- The expansion from an increase in autonomous spending depends on the marginal propensity to consume.
- The larger the marginal propensity to consume (MPC), the larger the simple spending multiplier.
- Simple spending multiplier = $1/(1 - MPC) = 1/MPS$
- Called "simple" spending multiplier because consumption is the only spending component that varies with income.

VI. The Aggregate Demand Curve

For each price level, there is a specific aggregate expenditure line, which yields a unique real GDP demanded. The aggregate demand curve is derived by altering the price level.

A. A Higher Price Level: Reduces consumption, investment, and net exports, which all reduce aggregate spending. This decrease in spending reduces real GDP demanded.

- B. A Lower Price Level:** Increases consumption, investment, and net exports, which increase at each level of real GDP. The increase in spending increases real GDP demanded.
- C. The Multiplier and Shifts in Aggregate Demand:** Changes in spending plans, such as changes in investment, consumption, or government purchases, shift the aggregate.

CHAPTER 10 - AGGRAGATE SUPPLY

I. Aggregate Supply in the Short Run:

The relationship between the economy's price level and the amount of output firms are willing and able to supply, other things constant. Factors held constant are resource prices, state of technology, and the institutional structure of the economy.

A. Labor and Aggregate Supply:

- **Labor Supply:** Depends on the real wage rate
 - The higher the wage, the more labor supplied.
 - The higher the price level, the less any given money wage purchases, so the less attractive that wage is to workers.
 - The real wage measures the wage in constant dollars, in terms of the real goods and services they buy.
 - Most labor contracts are negotiated in nominal wages—wages in dollars of the year in question.

B. Potential Output and the Natural Rate of Unemployment:

- When the actual price level of both workers and firms turns out as expected the economy produces its potential output.
- **Potential Output:** The economy's maximum sustainable output level, given supply of resources, state of technology, and formal and informal production incentives.
 - Also known as the natural rate of output or the full-employment rate of output.
- **Natural rate of unemployment:** Unemployment rate that occurs when the economy produces its potential GDP.

C. Actual Price Level Is Higher Than Expected

- The short run is a period in which some resource prices remain fixed by contract.
- A price level that is higher than expected results in a higher profit per unit, so firms have a profit incentive in the short run to increase production beyond the economy's potential level.

D. Why Costs Rise When Output Exceeds Potential

- Because the prices of some resources are fixed by contracts, the price level rises faster than the per-unit production cost, so firms find it profitable to increase the quantity supplied. At higher rates of output, however, the per-unit cost of additional output increases.

E. An Actual Price Level Is Lower Than Expected:

- Since production is less profitable when prices are lower than expected, firms reduce their quantity supplied, so the economy's output is below its potential.

F. The Short-Run Aggregate Supply Curve (SRAS):

- Shows the relationship between the actual price level and real GDP supplied.
 - **Short run:** Period during which some resource prices are fixed by agreements or labor contracts.
- **Slope of short-run aggregate supply curve:** Depends on how sharply the marginal cost of production rises as real GDP expands.

II. From the Short Run to the Long Run

- **Long run:** A period long enough to renegotiate all agreements based on knowledge of the actual price level. There are no surprises about the price level in the long run.

A. Closing an Expansionary Gap

- **The actual price level is higher than expected:** Aggregate demand curve intersects the short-run aggregate supply curve, and output exceeds the economy's potential.
- **Short-run equilibrium:** Occurs where aggregate demand intersects the short-run aggregate supply curve; aggregate demand is greater than expected
- **Expansionary gap:** The amount by which short-run output exceeds the economy's potential.
 - Actual unemployment rate is less than the natural rate of unemployment.
 - Output exceeding the economy's potential creates inflationary pressure.
 - **Long run:** Is a period during which firms and resource suppliers know about market conditions and have time to renegotiate resource payments based on that knowledge. Actual output can exceed the economy's potential in the short run but not in the long run.
 - **Long-run equilibrium:** Occurs where the aggregate demand curve intersects the vertical line drawn at potential output. Equalities that hold:
 - Expected price level = actual price level
 - Quantity supplied in the short run = potential output = quantity supplied in the long-run = quantity demanded

B. Closing a Recessionary Gap

The actual price level is lower than expected: Aggregate demand curve intersects the short-run aggregate supply curve to the left of potential output, and production is less than the economy's potential.

- **Recessionary gap:** The amount by which actual output falls short of potential GDP.
- **Long Run:** As resource costs fall, the short-run aggregate supply curve shifts outward until it intersects the aggregate demand curve where the economy produces its potential output.
- Actual unemployment rate is higher than the natural rate of unemployment.
- More workers compete for jobs, putting downward pressure on the nominal wage.

III. The Long-Run Aggregate Supply Curve

A. Tracing Potential Output:

- **Long-run aggregate supply (LRAS) curve:** A vertical line drawn at potential GDP. Depends on the supply of resources in the economy, the level of technology, and the production incentives provided by the formal and informal institutions of the economic system. Equilibrium real GDP equals long-run aggregate supply which equals potential output.
- **Equilibrium price level:** Depends on the aggregate demand curve.

B. Wage Flexibility and Employment

- Because nominal wages fall slowly, if at all, the supply-side adjustments needed to close a recessionary gap may take so long as to seem ineffective.
- The real wage falls if prices increase more than nominal wages.

IV. Shifts of the Aggregate Supply Curve:

Occur because of factors other than changes in the expected price level.

A. Aggregate Supply Increases: Occur because of:

- A change in the supply of labor because of:
 - Increases in the quantity and/or quality of the labor force.
 - Change in household preferences for labor versus leisure.
- A change in the supply of other resources
 - For example, changes in the capital stock or the quality or quantity of land
- Institutional changes that define property rights more clearly or make contracts more enforceable increase incentives to undertake productive activity.
- Beneficial supply shocks:
 - Unexpected events that increase aggregate supply, sometimes only temporarily, such as abundant harvests, discoveries of natural resources, or technological breakthroughs.
 - LRAS and SRAS shift right, increasing potential output and decreasing the price level along a given aggregate demand curve.

B. Decreases in Aggregate Supply

- **Adverse supply shocks:** Sudden, unexpected events that reduce aggregate supply, sometimes only temporarily. Examples include droughts, the fall of a government, or terrorist attacks.
 - Shift the LRAS and the SRAS curves to the left, reducing potential output and raising the price level.

Practice Questions

CHAPTER 5

1. Macroeconomics is the study of how individual choices are affected by economic forces.
True False
2. In the post World War II era, the average business expansion has lasted about 57 months.
True False
3. Capital is a stock variable.
True False
4. As the price level rises, individuals feel richer. Therefore, they will spend more.
True False
5. For a given aggregate supply curve, the price level and output both rise when aggregate demand decreases.
True False
6. If both aggregate demand and aggregate supply increase, then employment will increase.
True False
7. Macroeconomics includes the study of:
 - A. inflation.
 - B. firm pricing policies.
 - C. the relative prices of oil and coal.
 - D. individual choice.
8. The total annual market value of a nation's final output of goods and services computed at existing prices is called:
 - A. net national product.
 - B. aggregate income.
 - C. nominal GDP.
 - D. real GDP.
9. GDP is a:
 - A. stock concept and refers to the market value of all output sold.
 - B. stock concept and refers to the market value of final output.
 - C. flow concept and refers to the market value of all output sold.
 - D. flow concept and refers to the market value of final output.

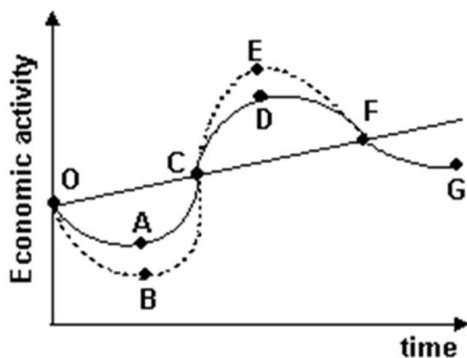
10. How does stock differ from flow?
 - A. A flow concept has meaning over a specified period of time, while a stock concept is a value at a point in time.
 - B. A flow concept is a value at a point in time, while a stock concept has meaning over a specified period of time.
 - C. They do not differ; both flow and stock concepts have meaning only over a specified period of time.
 - D. They do not differ; both flow and stock concepts are values at a point in time.

11. Fluctuations around the long-term growth rate of economic activity are called:
 - A. recessions.
 - B. depressions.
 - C. expansions.
 - D. business cycles.

12. If U.S. real GDP increases by 3.3 percent, we can infer that the United States experienced:
 - A. a recession.
 - B. an expansion.
 - C. a depression.
 - D. a trough.

13. The top of the business cycle is called:
 - A. an expansion.
 - B. a recession.
 - C. an upturn.
 - D. a peak.

14. During the business cycle, an economic expansion occurs:
 - A. at the peak of the business cycle.
 - B. at the trough of a business cycle.
 - C. in between the peak and trough.
 - D. in between the trough and peak.



15. Refer to the graph shown. A movement from points A to D represents a(n):
 - A. trough.
 - B. peak.
 - C. recession.
 - D. expansion.

16. Keynesian economists believe:
 - A. government policies do not affect economic activity.
 - B. government can implement policy proposals that can positively impact the economy.
 - C. most government policies would probably make things worse.
 - D. the economy ought to be left to market forces.
17. A period of contraction and inflation in the price level is called:
 - A. deflation.
 - B. regurgitation
 - C. stagnation.
 - D. stagflation.

CHAPTER 6

18. Gross domestic product equals the sum of consumption, investment, and government purchases.
True False
19. Other things equal, increased imports decrease GDP.
True False
20. It is not possible for the government to spend more than it collects in taxes.
True False
21. The main function of financial markets is to direct consumers' saving to firms that use it for investment spending.
True False
22. Taxes are an injection into the circular flow.
True False
23. Exports are an injection into the circular flow.
True False
24. The largest expenditure component of GDP is:
 - A. consumption.
 - B. investment.
 - C. net exports.
 - D. government spending.
25. Using the expenditure approach, gross domestic product equals:
 - A. gross national product.
 - B. gross national product minus net exports
 - C. the sum of consumption, investment, government purchases.
 - D. the sum of consumption, investment, government purchases, and net exports.

26. Which of the following equations is the correct equation for GDP?
- A. $GDP = C + I + G$
 - B. $GDP = C + I + G + X + M$
 - C. $GDP = C + I + G - X - M$
 - D. $GDP = C + I + G + (X - M)$
27. Double counting in the national income accounts will be avoided if GDP is computed by totaling all:
- A. sales of final output.
 - B. sales of final output and intermediate goods.
 - C. sales.
 - D. production costs.
28. Government expenditures for social security and unemployment insurance are, for GDP accounting purposes, considered:
- A. transfers, and are included in government spending as part of GDP.
 - B. transfers, and are not included in government spending as part of GDP.
 - C. purchases, and are included in government spending as part of GDP.
 - D. purchases, and are not included in government spending as part of GDP.
29. Which of the following is an example of an intermediate product?
- A. A pair of skis sold by a sporting goods retailer to a skier
 - B. A share of IBM stock
 - C. The lumber produced by Boise Cascade and sold to a builder of old houses
 - D. An antique car sold to the highest bidder
30. The reason economists include only the value of final goods and services when they calculate GDP is that intermediate goods:
- A. do not create value added.
 - B. do not add to economic welfare.
 - C. have no social value.
 - D. would be double counted otherwise.
31. Value added is calculated by:
- A. subtracting the cost of intermediate goods used in production from the selling price of a product.
 - B. adding the cost of materials used in production to the value of sales.
 - C. subtracting the value of sales from the cost of materials used in production.
 - D. adding the value of output to the value of inputs.
32. Conceptually, a country's GDP equals:
- A. the sum of the value of its final output and the value of the intermediate goods used to produce that output.
 - B. the difference between the value of its final output and the value of the intermediate goods used to produce that output.
 - C. the sum of the value added at all stages of production.
 - D. the sum of the value of all the intermediate goods used to produce final output.

33. Suppose the value of your home increases from \$100,000 to \$125,000. If you continue to live in your home, the increase in its value:
- A. adds nothing to GDP.
 - B. increases GDP by \$25,000.
 - C. increases GDP by \$100,000.
 - D. increases GDP by \$125,000.
34. Transfers of assets, such as stock sales are:
- A. included in GDP because they raise domestic production.
 - B. included in GDP because they increase domestic wealth.
 - C. not included in GDP because they do not increase domestic production.
 - D. not included in GDP because they do not increase domestic wealth.
35. Which of the following is *not* a part of U.S. GDP?
- A. The payments for an insurance policy on an old BMW sold by a U.S. company
 - B. The value of a BMW imported from Germany
 - C. The value of a BMW produced in the United States
 - D. The commissions earned by a BMW dealership in the United States
36. According to the Circular Flow of Income and Expenditure:
- A. GNP equals GDP.
 - B. aggregate income equals aggregate production.
 - C. assets equal liabilities.
 - D. supply equals demand.
37. Net exports are defined as:
- A. GDP minus exports.
 - B. exports less imports.
 - C. imports less exports.
 - D. exports plus imports.
38. If U.S. imports of goods and services exceed exports U.S.:
- A. GDP is less than the sum of consumption, investment, and government purchases.
 - B. GDP exceeds the sum of consumption, investment, and government purchases.
 - C. net exports are positive.
 - D. GDP equals the sum of consumption, investment, and government purchases.

	In billions of dollars
Consumption	5,100
Investment	1,100
Transfer payments	1,050
Government purchases	1,400
Exports	850
Imports	950
Net foreign factor income	20

39. Calculate GDP using the information shown.

- A. 6,400
- B. 7,500
- C. 9,400
- D. 10,470

	In billions of dollars
Consumption	5,100
Investment	1,100
Transfer payments	1,050
Government purchases	1,400
Exports	850
Imports	950
Net foreign factor income	20

40. Calculate net exports using the information shown.

- A. -100
- B. 100
- C. 850
- D. 950

	In trillions of dollars
Consumption	3.5
Investment	1.2
Government Purchases	1.8
Exports	0.6
Imports	0.4

41. Refer to the table shown. What is the economy's GDP?

- A. \$6.5 trillion
- B. \$7.1 trillion
- C. \$6.7 trillion
- D. \$6.1 trillion

42. The measure of the cost of a standard basket of goods and services in any period relative to the cost of the same basket of goods and services in the base year is called:

- A. cost-of-living indicator.
- B. consumption production index.
- C. consumer production index.
- D. consumer price index.

43. The CPI is a measure of the:
- A. real wage.
 - B. price of a specific good or service.
 - C. rate of inflation.
 - D. average level of prices relative to prices in the base year.
44. A CPI that equals 1.34 in 2005 (when 2000 is the base year) means that:
- A. prices in 2005 are 34 percent higher than in 2004.
 - B. the CPI equals \$1.34 in 2005.
 - C. the inflation rate in 2005 is 134 percent.
 - D. the average level of prices is 34 percent higher in 2005 than in the base year.
45. If the total expenditures of a typical family equaled \$35,000 per year in 2000 and the exact same basket of goods and services cost \$40,000 in the year 2005, the family's cost of living:
- A. increased by 14 percent.
 - B. decreased by 12.5 percent.
 - C. decreased by 14 percent.
 - D. increased by 12.5 percent.
46. When statisticians fail to take into account improvements in the quality of goods and services, the CPI will tend to _____ the rate of inflation.
- A. understate
 - B. precisely measure
 - C. be unrelated to
 - D. overstate
47. The substitution bias in the CPI refers to the failure of statisticians to:
- A. allow for the possibility that consumers switch from products with rising prices.
 - B. allow for the possibility that consumers switch stores at which they shop.
 - C. take into account improvements in goods and services.
 - D. take into account new products purchased by consumers.

CHAPTER 7

48. Jamaal lost his job when a mechanical device replaced people with his skills. If his skills are non-transferable, he would be considered to be structurally unemployed.
True False
49. The sum of the number of employed persons and the number of unemployed persons equals the civilian non-institutional population.
True False
50. If the Bureau of Labor Statistics considers Mary to be a discouraged worker, then she is counted as unemployed for purposes of computing the official unemployment rate.
True False

51. If the unemployment rate drops, then it necessarily follows that some of the people who were once unemployed are now employed.
True False
52. The unemployment rate is calculated by dividing the number of unemployed people by the labor force.
True False
53. People who work part-time, or have a full-time job that doesn't use all their skills, are included in:
A. the underemployed.
B. discouraged workers.
C. phantom employment.
D. cyclical unemployment.
54. When people stop looking for work, because they cannot find a job but still want a job, they're called:
A. unemployed.
B. structural unemployment.
C. underemployed.
D. discouraged workers.
55. If there are 81.0 million people not in the labor force; 154.0 million in the civilian labor force, and 140.9 million employed. How many people are counted as unemployed?
A. 81.0 million
B. 73.0 million
C. 59.9 million
D. 13.1 million
56. If there are 81.0 million people not in the labor force; 154.0 million in the civilian labor force, and 140.9 million employed. What is the unemployment rate?
A. 13.1
B. 9.3
C. 8.5
D. 5.5
57. Suppose there are 685,000 discouraged workers. These people:
A. cannot work regardless of the economy.
B. are counted as employed.
C. are counted as unemployed.
D. are not counted as being in the labor force.
58. Structural unemployment is caused by:
A. a general downturn in the economy.
B. people quitting a job just long enough to look for and find another one.
C. people over 65 who don't really want to work.
D. people losing a job when their skills become obsolete due to technological innovations.

59. Unemployment caused by recession is called:
- A. frictional unemployment.
 - B. cyclical unemployment.
 - C. natural unemployment.
 - D. structural unemployment.
60. Frictional unemployment is most closely associated with:
- A. a general downturn in the economy.
 - B. people quitting a job just long enough to look for and find another one.
 - C. people who are unemployable due to alcohol or drug addictions.
 - D. people losing a job when their skills become obsolete due to technological innovations.
61. Underemployment includes people:
- A. who work "off-the-books" to avoid tax liabilities.
 - B. who are working part time, or not using all their skills, at a full-time job.
 - C. who are tired of looking for a job, so they quit looking, but still want one.
 - D. whose skills are not in demand anymore.
62. The descriptions give the responses of four individuals to a Bureau of Labor Statistics (BLS) survey of employment.
1. *Mollie* just graduated from college and is now looking for work. She has had three job interviews in the past month.
 2. *George* works in an automotive assembly plant. He was laid off six months ago as the economy weakened. He expects to return to work in several months when national economic conditions improve.
 3. *Jeanette* worked as an aircraft design engineer until she lost her job last year. She has been looking for similar work for a year, but no company is interested in her skills.
 4. *Ricardo* lost his job last year when his company downsized. He tried to find another job for a year but was unsuccessful and quit looking for work.
- Which individual is frictionally unemployed?
- A. 1
 - B. 2
 - C. 3
 - D. 4
63. The full-employment rate of unemployment is also called the:
- A. potential rate of unemployment.
 - B. cyclical rate of unemployment.
 - C. frictional rate of unemployment.
 - D. natural rate of unemployment.
64. Inflation is a rise in:
- A. the general level of prices over time.
 - B. the standard of living over time.
 - C. industrial production.
 - D. real GDP.

65. Which measures the changes in the prices of a "market basket" of some 300 goods and services purchased by typical urban consumers?
- A. The GDP price index.
 - B. The Consumer Price Index.
 - C. The Retail Trade survey.
 - D. The Survey of Manufactures.
66. If the Consumer Price Index was 170 in one year and 180 in the next year, then the rate of inflation from one year to the next was approximately:
- A. 5.5 percent.
 - B. 5.9 percent.
 - C. 6.3 percent.
 - D. 7.2 percent.
67. Cost-push inflation may be caused by:
- A. a decline in per-unit production costs.
 - B. a decrease in wage rates.
 - C. a negative supply shock.
 - D. an increase in resource availability.
68. Inflation caused by a rise in per-unit production costs is referred to as:
- A. cost-push inflation.
 - B. demand-pull inflation.
 - C. unanticipated inflation.
 - D. hyperinflation.
69. Inflation that occurs when total spending is greater than the economy's ability to produce output at the existing price level is:
- A. anticipated inflation.
 - B. demand-pull inflation.
 - C. cost-push inflation.
 - D. unanticipated inflation.
70. Inflation that occurs when total spending is greater than the economy's ability to produce output at the existing price level is:
- A. anticipated inflation.
 - B. demand-pull inflation.
 - C. cost-push inflation.
 - D. unanticipated inflation.
71. Unanticipated inflation tends to penalize:
- A. people who save money in financial institutions.
 - B. individuals who borrow money from financial institutions.
 - C. businesses that borrow money from financial institutions.
 - D. governments that have a progressive personal income tax.

72. Assume that there is a fixed rate of interest on contracts for borrowers and lenders. If unanticipated inflation occurs in the economy, then:
- both lenders and borrowers benefit.
 - both lenders and borrowers are hurt.
 - borrowers are hurt, but lenders benefit.
 - lenders are hurt, but borrowers benefit.
73. Consumers in an economy buy only three general types of products, A, B, and C. Quantity purchased and changes in the prices of these items over a period are shown below:

Product	Quantity	Average Price Per Unit	
		Year 1	Year 2
A	10	\$10	\$8
B	15	20	22
C	8	50	55

Using year 1 as a base, the value of the country's price index in year 2 is:

- 100.0.
- 103.9.
- 113.2.
- 106.3.

CHAPTER 8

74. Productivity is generally measured as:
- output per worker.
 - nominal output over time.
 - real output over time.
 - output per year.
75. Providing workers with on-the-job training will increase:
- average labor productivity.
 - the share of the population employed.
 - the unemployment rate.
 - the labor force participation rate.
76. When a firm builds a new factory, this is an example of an investment in:
- human capital.
 - physical capital.
 - the market.
 - research and development.
77. Which of the following is an example of an investment in physical capital?
- A firm trains workers to operate new machinery.
 - A firm pays for workers to take college classes.
 - A chemical firm employs chemists to develop new chemicals.
 - A firm purchases new equipment for a manufacturing process.

78. Countries with small amounts of capital per worker tend to have _____ levels of real GDP per person and _____ levels of average labor productivity.
- A. high; high
 - B. high; low
 - C. low; low
 - D. low; average
79. The principle of diminishing returns to capital states that if the amount of labor and other inputs employed is constant, then the greater the amount of capital in use the:
- A. less is produced.
 - B. less production is wasted.
 - C. the more an additional unit of capital adds to production.
 - D. the less an additional unit of capital adds to production.
80. Increasing the capital available to the workforce, holding other factors constant, tends to _____ total output while _____ average labor productivity.
- A. increase; decreasing
 - B. increase; increasing
 - C. increase; not changing
 - D. decrease; increasing
81. Most economists agree that _____ are the single most important source of productivity improvements.
- A. increases in human capital
 - B. increases in physical capital
 - C. technological advances
 - D. discoveries of natural resources
82. The application of new technologies to the production process will increase:
- A. average labor productivity.
 - B. the share of the population employed.
 - C. the unemployment rate.
 - D. the quantity of human capital.
83. Alpha has \$40,000 of capital per worker, while Beta has \$5,000 of capital per worker. In all other respects, the two countries are the same. According to the principle of diminishing returns to capital, an additional unit of capital will increase output _____ in Alpha compared to Beta, holding other factors constant.
- A. more
 - B. less
 - C. not at all
 - D. by the same amount
84. A government policy in which the private sector can operate productively is:
- A. the taxation of savings.
 - B. the suppression of political dissent.
 - C. establishing well-defined property rights.
 - D. government ownership of capital.

85. In order to promote growth, the poorest countries—in contrast to the richer countries—need most to:
- A. invest in human capital.
 - B. improve their infrastructure.
 - C. improve their legal and political environments.
 - D. increase their capital stock.
86. An example of a government policy to enhance technological progress is:
- A. the construction of an interstate highway system.
 - B. government support for basic research.
 - C. maintaining a well-functioning legal system.
 - D. the provision of publicly-funded education.
87. Output per person on a country level is another way to think about:
- A. real GDP per capita.
 - B. nominal GDP.
 - C. productivity.
 - D. GDP growth rates.
88. Increases in productivity per person lead to increases in per capita income called:
- A. economic growth.
 - B. GDP per capita.
 - C. the GDP deflator.
 - D. the producer productivity index.
89. The productivity of workers can depend upon which of the following?
- A. Human capital
 - B. Natural resources
 - C. Technology
 - D. All of these are determinants of productivity.
90. Having more technology means:
- A. that the same inputs will produce more outputs.
 - B. countries will be able to produce more with the same amount of physical capital.
 - C. countries will be able to produce more with the same amount of human capital.
 - D. All of these are true.

CHAPTER 9

91. The aggregate demand curve shows that when the price level rises, the quantity of real GDP demanded decreases.
True False
92. An increase in net exports reduces aggregate demand.
True False

93. An increase in real interest rates will increase aggregate demand.
True False
94. An increase in consumer wealth will decrease aggregate demand.
True False
95. The slope of the consumption function equals the marginal propensity to consume.
True False
96. The consumption function will shift because of a change in current disposable income.
True False
97. The four components of aggregate expenditures are:
A. consumption, imports, government spending, and net exports.
B. consumption, interest payments, government spending, and net exports.
C. consumer durables, investment, government spending, and net exports.
D. consumption, investment, government spending, and net exports.
98. Consumption expenditures
A. Account for approximately two-thirds of total spending.
B. Include purchases of new and used goods by consumers.
C. Are equal to disposable personal income plus personal saving.
D. Are equal to consumer spending plus transfer payments.
99. Which of the following forces did Keynes assert had the strongest influence on consumption decisions?
A. Prices.
B. Wealth.
C. Interest rates.
D. Disposable income.
100. If consumption is \$340 and saving is \$20, then disposable income
A. Is \$340.
B. Is \$360.
C. Is \$320.
D. Cannot be determined from the information given.
101. The MPC indicates the portion of
A. An additional dollar of disposable income that will be saved.
B. An additional dollar of disposable income that will be spent.
C. Total income that will be saved.
D. Total income that will be spent.
102. The MPC + MPS must always equal
A. The slope of the consumption function.
B. 1.
C. The APC.
D. 0.

103. The marginal propensity to consume can be found by dividing
- A. Total consumption by total saving.
 - B. Total consumption by the number of people consuming.
 - C. The change in total consumption by the change in disposable income.
 - D. Disposable income by total consumption.
104. The largest expenditure component of U.S. GDP is:
- A. consumption.
 - B. investment.
 - C. government purchases.
 - D. exports.
105. Increases in the overall price level:
- A. reduce people's dollar-denominated wealth.
 - B. mean that a given number of dollars won't buy as much in terms of real goods and services.
 - C. mean people will reduce their consumption.
 - D. All of these are true.
106. A rise in the overall price level means that:
- A. a given number of dollars won't buy as much in terms of real goods and services.
 - B. dollar-denominated assets have lost their value.
 - C. the cost of living has gone down.
 - D. None of these is true.
107. When the price level increases people:
- A. feel less wealthy.
 - B. feel more wealthy.
 - C. have the same real value of assets, regardless of the change in the price level.
 - D. experience a bubble forming in the economy overall.
108. Higher interest rates make it:
- A. more expensive to borrow.
 - B. harder to get a loan typically.
 - C. easier to get a loan typically.
 - D. None of these is true.
109. Lower interest rates motivate:
- A. firms to invest less in new factories and working capital.
 - B. firms to invest more in new factories and working capital.
 - C. individuals to spend less on consumption goods.
 - D. individuals to spend less on capital goods.

110. Net exports are:
- A. exports minus imports.
 - B. imports minus exports.
 - C. imports divided by exports.
 - D. imports plus exports.
111. When the U.S. price level decreases relative to the rest of the world:
- A. exports and net exports will increase.
 - B. imports and net exports will increase.
 - C. exports will increase and net exports will decrease.
 - D. exports will decrease and net exports will increase.
112. Because the price level shares a negative relationship with aggregate expenditures on GDP, the aggregate demand curve is:
- A. downward sloping.
 - B. upward sloping.
 - C. perfectly elastic.
 - D. perfectly inelastic.
113. Suppose that when disposable income rises from \$5.2 trillion to \$6.0 trillion, consumption rises from \$5.0 trillion to \$5.6 trillion. What is the marginal propensity to save?
- A. .25.
 - B. .33.
 - C. .75.
 - D. .67.
114. If disposable income rises from \$5.2 trillion to \$6.0 trillion and consumption rises from \$5.0 trillion to \$5.6 trillion. What is the marginal propensity to consume?
- A. .25.
 - B. .33.
 - C. .75.
 - D. .67.

CHAPTER 10

115. Aggregate supply is the relationship between aggregate demand and the quantities of aggregate output firms are willing and able to produce, other things constant.
True False
116. Compensation is usually negotiated in terms of the nominal wage because wage agreements are based on expected price levels.
True False
117. If the actual price level is higher than the expected price level, the economy will expand in the short run.
True False

118. In the short run, the price level is determined solely by aggregate supply.
True False
119. Increases in the costs of production will shift the short-run aggregate supply curve to the left.
True False
120. Aggregate supply is:
A. total quantity of the production of all the households in the economy.
B. total quantity of goods and services demanded in the economy.
C. market value of the total quantity of goods and services demanded in the economy.
D. market value of the total quantity of goods and services supplied in the economy.
121. The aggregate supply curve shows the relationship between:
A. the overall price level in the economy and total production by firms.
B. the unemployment rate and total production by firms.
C. the overall price level in the economy and the unemployment rate.
D. the inflation rate and the overall price level in the economy.
122. In the short run, the aggregate supply curve:
A. slopes upward.
B. slopes downward.
C. is perfectly elastic.
D. is perfectly inelastic.
123. The slope of the short-run aggregate supply curve shows that:
A. as overall price levels increase, firms are willing to produce more.
B. as overall price levels decrease, firms are willing to produce more.
C. firms are constrained to a certain level of short run output, regardless of price.
D. firms are constrained to a certain short run price, regardless of level of output.
124. The aggregate supply curve shows the relationship between the amount of output firms want to produce and the _____.
A. nominal interest rate
B. real interest rate
C. unemployment rate
D. inflation rate
125. The AS curve slopes upward because:
A. all firms will increase their prices in response to an increase in aggregate demand, but some will increase their output and others will decrease their output.
B. all firms will increase their prices, but not their output in response to an increase in aggregate demand.
C. some firms will increase their prices and their output in response to an increase in aggregate demand.
D. all firms will increase their prices and their output in response to an increase in aggregate demand.

126. High expected inflation leads to ____ increases in wages and costs and to ____ actual inflation.
- A. large; high
 - B. large; low
 - C. small; low
 - D. small; high
127. When actual output exceeds potential output there is ____ output gap and the rate of inflation will tend to ____.
- A. an expansionary; increase
 - B. an expansionary; decrease
 - C. no; remain the same
 - D. a recessionary; increase
128. A difference between the aggregate supply curve and an individual supply curve is:
- A. the aggregate supply curve represents production in the economy as a whole rather than just one good or service.
 - B. the aggregate supply curve represents production in an entire market rather than just one firm.
 - C. the aggregate supply curve represents goods and services sold rather than the total actually produced by each firm.
 - D. None of these is true.
129. When actual output is less than potential output, there is ____ output gap and the rate of inflation will tend to ____.
- A. an expansionary; increase
 - B. an expansionary; decrease
 - C. a recessionary; decrease
 - D. a recessionary; increase
130. A leftward shift of the *AS* curve indicates:
- A. a decrease in aggregate supply.
 - B. an increase in aggregate supply.
 - C. a decrease in potential GDP.
 - D. an increase in potential GDP.
131. As the available technology improves, _____ shifts to the _____.
- A. aggregate demand; left
 - B. aggregate demand; right
 - C. aggregate supply; left
 - D. aggregate supply; right
132. When the economy is producing at a level greater than its long-run aggregate supply:
- A. it is pushing some of its resources to operate beyond capacity.
 - B. the economy is experiencing greater economic growth.
 - C. it causes a bubble to form in one of its major sectors.
 - D. It is not possible to produce beyond the long-run aggregate supply curve.

133. Economic growth is:
- A. an increase in our economy's potential output.
 - B. represented by the long-run aggregate supply curve shifting to the right.
 - C. a result of having more natural resources, land or capital.
 - D. All of these are true.
134. When the economy is creating less output than its potential, it means:
- A. there are some resources that are unemployed.
 - B. the economy is in an economic boom.
 - C. contractionary policy needs to be enacted.
 - D. governments are likely to reduce their spending.
135. A situation in which output decreases while prices increase is often referred to as:
- A. stagflation.
 - B. inflation.
 - C. negative economic growth.
 - D. a recession.
136. If a hurricane were to wipe out the majority of the eastern seaboard in the United States:
- A. only the long-run aggregate supply curve would shift left.
 - B. the long-run and short-run aggregate supply curves would both shift left.
 - C. only the short-run aggregate supply curve would shift left.
 - D. neither the short-run nor long-run aggregate supply curves would be affected.
137. If a positive permanent supply shock were to occur, the resulting equilibrium would be:
- A. a higher level of output and prices.
 - B. a lower level of output and prices.
 - C. a higher level of output at lower prices.
 - D. a lower level of output at higher prices.
138. The self-correcting property of the economy means that output gaps are eventually eliminated by:
- A. rising or falling prices.
 - B. falling prices only.
 - C. increasing or decreasing potential output.
 - D. government policy.
139. The self-correcting tendency of the economy means that rising inflation eventually eliminates:
- A. expansionary gaps.
 - B. recessionary gaps.
 - C. exogenous spending.
 - D. unemployment.

140. An economy with an expansionary gap will, in the absence of stabilization policy, eventually experience a(n) _____ in the inflation rate, leading to a(n) _____ in output.
- A. increase; increase
 - B. increase; decrease
 - C. decrease; increase
 - D. decrease; decrease
141. Shifts in _____ can push the economy out of long-run equilibrium.
- A. the *AD* curve only
 - B. the *AS* curve only
 - C. either the *AD* curve or the *AS* curve
 - D. the *PAE* line only

Solutions to Practice Questions

CHAPTER 5

1. FALSE
2. TRUE
3. TRUE
4. FALSE
5. FALSE
6. TRUE
7. A
8. C
9. D
10. A
11. D
12. B
13. D
14. D
15. D
16. B
17. C

CHAPTER 6

18. FALSE
19. TRUE
20. FALSE
21. TRUE
22. FALSE
23. TRUE
24. A
25. D
26. D
27. A
28. B
29. C
30. D
31. A
32. C
33. A
34. C
35. B
36. B
37. B
38. A
39. B
40. A

41. C
42. D
43. D
44. D
45. A
46. D
47. A

CHAPTER 7

48. TRUE
49. FALSE
50. FALSE
51. FALSE
52. TRUE
53. A
54. D
55. D
56. C
57. D
58. D
59. B
60. B
61. B
62. A
63. D
64. A
65. B
66. B
67. C
68. A
69. B
70. B
71. A
72. D
73. D

CHAPTER 8

74. A
75. A
76. B
77. D
78. C

79. D
80. B
81. C
82. A
83. B
84. C
85. C
86. B
87. A
88. A
89. D
90. D

CHAPTER 9

91. TRUE
92. FALSE
93. FALSE
94. FALSE
95. TRUE
96. FALSE
97. D
98. A
99. D
100. B
101. B
102. B
103. C
104. A
105. D
106. A
107. A
108. A
109. B
110. A
111. A
112. A
113. A
114. C

CHAPTER 10

115. FALSE
116. TRUE
117. TRUE

118. FALSE
119. TRUE
120. D
121. A
122. A
123. A
124. D
125. C
126. A
127. A
128. A
129. C
130. A
131. D
132. A
133. D
134. A
135. A
136. B
137. C
138. A
139. A
140. B
141. C