Part I: Multiple Choice. 10 points (each question is worth ½ point).

1. The aggregate demand curve is downward-sloping because
   (a) The lower price level makes it cheaper for the government to supply money
   (b) As the price level increases, the demand for money increases, causing the interest rate to increase and output to decrease
   (c) Some goods become cheaper as aggregate output decreases
   (d) As prices decrease, there is less incentive for firms to produce

   Answer: B

2. Which statement is false?
   (a) Through the use of fiscal policy, the government can shift the aggregate supply curve
   (b) An expansionary fiscal policy will be more inflationary in the long run than in the short run
   (c) Demand-pull inflation occurs when the aggregate demand curve shifts to the right
   (d) In the short run, input prices do not respond fully to the changes in the overall price level
   (e) None of the above

   Answer: A

3. Suppose the economy is currently at the maximum potential output level. A tax cut will result in
   (a) No crowding out of investment
   (b) Partial crowding out of investment
   (c) Partial crowding out of the money supply
   (d) Complete crowding out of investment
   (e) None of the above

   Answer: D

4. Evidence from 1970 to 2004 suggests that there is ______ relationship between inflation and unemployment.
   (a) A weak negative
   (b) No particular
   (c) A strong negative
   (d) A weak positive

   Answer: B

5. Which of the following is most likely to cause stagflation?
   (a) Falling prices on imported oil
   (b) Rising prices on imported oil
   (c) Tax cuts
   (d) Increase in the money supply
Answer: B

6. Which of the following theories of unemployment assumes that higher wages encourage workers to be more productive?
   (a) Sticky wages
   (b) Efficiency wages
   (c) Relative wage explanation
   (d) Minimum wage

Answer: B

7. Assume that Congress and the President make tax and spending decisions without a balanced-budget amendment or any other deficit-targeting measure. In the event of a negative demand shock,
   (a) The deficit would decrease, worsening the decrease in AD caused by the shock.
   (b) The deficit would increase, worsening the decrease in AD caused by the shock.
   (c) The deficit would decrease, lessening the decrease in AD caused by the shock.
   (d) The deficit would increase, lessening the decrease in AD caused by the shock.

Answer: D

8. Time lags can limit the effectiveness of stabilization policy. Which of the following lag types is associated with the conduct of fiscal policy?
   (a) Recognition lag
   (b) Implementation lag
   (c) Response lag
   (d) All of the above
   (e) None of the above

Answer: D

9. A stock is
   (a) A certificate that certifies ownership of a certain portion of a firm
   (b) A certificate that certifies when the owner of an asset actually sells it for more than he paid for it
   (c) A document that formally promises to pay back a loan under specified terms, usually over a specific time period
   (d) A certificate that certifies an increase in the value of an asset

Answer: A

10. The Dow Jones Industrial Average is
    (a) An index based on the stock prices of the largest 500 firms traded on the New York Stock Exchange, the NASDAQ Stock Market, and the American Stock Exchange - it is the oldest and most followed index of stock market performance
(b) An index based on the stock prices of 30 actively traded large companies
(c) An index based on the stock prices of 50 actively traded large companies - it is a recently formulated and widely followed index of stock market performance
(d) An index based on the stock prices of over 5000 companies traded on the NASDAQ Stock Market

Answer: B

11. If input prices adjust at the same speed as output prices then:
   (a) Monetary policy is ineffective at raising output
   (b) Fiscal Policy is ineffective at raising output
   (c) The Aggregate Supply Curve is vertical
   (d) All of the above
   (e) None of the above

Answer: D

12. The Social Security Trust Fund is primarily invested in
   (a) U.S. Dollar Certificates of Deposit (CD’s)
   (b) Stocks
   (c) U.S. Treasury-backed securities
   (d) Both Stocks and U.S. Treasury-backed Securities

Answer: C

13. Social Security benefits
   (a) Are independent of lifetime earnings
   (b) Decrease with lifetime earnings
   (c) Increase with lifetime earnings
   (d) Are highest for individuals with an average lifetime earnings of $20,000

Answer: C

14. According to the Keynesian theory of consumption, a tax cut is likely to have
   (a) No effect on consumption
   (b) A large positive effect on consumption
   (c) A large negative effect on consumption
   (d) None of the above

Answer: B

15. The Life-Cycle Theory of Consumption assumes that individuals’ immediate consumption depends on
   (a) Current income
   (b) Current wealth
   (c) Average expected income
   (d) All of the above
(e) None of the above

Answer: D

16. A direct transfer payment from the government to each individual will cause
   (a) Consumption to increase and the labor supply to increase
   (b) Consumption to decrease and the labor supply to increase
   (c) Consumption to increase and the labor supply to decrease
   (d) Consumption to decrease and the labor supply to decrease

Answer: C

17. According to Monetarists, when the economy is experiencing inflation, the best course of action is to:
   (a) Increase the money supply through open market operations
   (b) Do nothing; the economy will return to equilibrium on its own
   (c) Cut taxes and increase incentives to save and invest, which will increase aggregate supply
   (d) Use a monetary rule that accommodates real growth but not inflation

Answer: D

18. “Animal spirits” is the Keynesian explanation for fluctuations in:
   (a) Consumption spending (C)
   (b) Investment spending (I)
   (c) Government spending (G)
   (d) Net exports (NX)

Answer: B

19. Suppose deficit-targeting legislation is in place, and there is a sudden negative supply shock. How will the government respond to this shock?
   (a) The government will increase spending or decrease taxes
   (b) The government will increase spending or increase taxes
   (c) The government will decrease spending or decrease taxes
   (d) The government will decrease spending or increase taxes

Answer: D

20. The economy experiences a negative oil price shock and an increase in tax rates at the same time. We can expect:
   (a) Output to increase and prices to increase
   (b) Output to either increase or decrease, and prices to increase
   (c) Output to increase and prices to either increase or decrease
   (d) Output to decrease and prices to either increase or decrease

Answer: D
PART II. Short Answer. 10 points (each question is worth 2 points).

Answer each question and draw a graph if requested. You must show your work to receive full credit.

1. Briefly describe the difference between a simple market demand curve and the aggregate demand curve. What does each curve represent, and how are they different?

The market demand curve shows the negative relationship between prices and the quantity demanded in the market. According to this curve, at higher prices for a given good, people demand lower quantities of this good, holding income and all other prices constant. There is a causal relationship between prices and output.

The aggregate demand curve depicts all the points at which both the goods market and the money market are in equilibrium. Aggregate demand falls when prices rise because higher prices increase money demand and the interest rate, causing investment and hence equilibrium output to fall.

2. List three events or factors which can shift the aggregate demand curve.

Monetary policy, fiscal policy and ‘animal spirits’ can all shift the AD curve, as can increases in consumption or exports.

3. Suppose this morning you read an article about Social Security running out very soon and people being left without coverage. Then your friend tells you how Social Security is still likely to function for another two decades. What explains the presence of such very different opinions? Briefly explain (hint: think of how Social Security funds are invested).

Much of the Social Security funds is invested in Treasury Bonds. Those who argue that the Fund is running out very soon ignore the fact that the Social Security administration can sell its Treasury bonds to make more money available for transfer payments. In addition, the majority of the funds used by Social Security to make current payments are funded by current taxes which will remain even if the Trust Fund runs out of money.

4. Is the New Classical view of the labor market consistent with the upward-sloping aggregate supply curve? Briefly explain.

New Classical economists believe the interaction of supply and demand in the labor market brings about equilibrium and that unemployment (beyond frictional and structural amounts) does not exist. Since they believe in (almost) full employment and that the economy is already
producing at full capacity, their view is consistent with the vertical, not the upward-sloping, aggregate supply curve.

5. Suppose the economy is currently characterized by high inflation. If you are a Keynesian, what would be your recommendation if the goal were to lower inflation? Graphically illustrate how your recommendation would work.

Keynesians believe that contractionary policy can effectively decrease aggregate output by shifting the aggregate demand curve to the left, lowering prices (assuming an upward-sloping aggregate supply curve). See graph below.

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**PART III. Newspaper Analysis. 10 points (each question is worth 5 points).**

Answer each question. You must show your work to receive full credit.

1. Read the following excerpt from an article that appeared in the *New York Times* on November 7, 2008:

*Jobless Rate at 14-Year High After Big October Losses*

"Squeezed by tight credit and plunging spending power, the American economy is losing jobs at the fastest pace since 2001, and the losses could accelerate to levels not seen since the deep recession of the early 1980s. Employers shed 240,000 more jobs in October, the government reported Friday morning, the 10th consecutive monthly decline and a clear signal that the economic slowdown is troubling households and businesses. Since August, the economy has lost 651,000 jobs — more than three times as many as were lost from May to July. So far, 1.2 million jobs have been lost this year.... Wages have effectively shrunk for most workers, as rising costs for food and fuel have more than absorbed meager increases in pay. That has further crimped American proclivities to spend."

1.1 Using the labor market graph, describe the events mentioned in the excerpt above. In particular, show how labor demand or labor supply changes and the result on real wages.
Labor supply does not change, while labor demand shifts to the left. As a result, the equilibrium real wage declines, and the quantity of labor also falls. See graph below.

1.2 The article mentions that real wages declined despite increasing nominal wages. Discuss how this is possible, using the definition of the real wage.

Real wage is nominal wage divided by the price level. The change in real wage is the change in nominal wage minus the change in the price level (inflation). Therefore, if inflation is higher than the percentage increase in nominal wages, real wages fall.

1.3 Based on the Phillips curve and the aggregate supply curve, what would you expect will happen to aggregate output as unemployment rises (in the short run)? According to Okun’s law, what happens to output if unemployment increases by 1%?

Based on the short-run Phillips curve, higher unemployment is associated with lower inflation. Based on the AS curve, lower inflation is associated with lower aggregate output. Okun’s law states that a 1% increase in unemployment is associated with a 3% decrease in real GDP.

2. Read the following excerpt from an article which appeared in the New York Times on November 5, 2008:

For Obama, Long-Term Ills and Short-Term Pain

“Mr. Obama will enter office with the United States, and most developed countries, in a recession.....Stimulating the economy will almost certainly be at the top of the economic agenda.....Some have suggested that Mr. Obama should push for infrastructure spending... as a way to stimulate the economy and provide jobs while attacking long-term problems. The tax rebates earlier this year provided a temporary lift to spending, but the effect faded almost immediately, and a repeat of that tactic could increase the deficit without much offsetting benefit.”

2.1 Briefly describe how infrastructure spending can stimulate the economy (hint: make sure to illustrate the effect on aggregate expenditure as well as the AD-AS graph).

Infrastructure spending is a form of government spending. As G increases, the aggregate expenditure curve shifts up, causing equilibrium output to increase for a given price level.
Therefore, the aggregate demand curve shifts outward. Aggregate output and the price level both increase. See graph below.

2.2 The tax rebates caused a temporary rise in spending, but the effect quickly disappeared. Is this consistent with the Life-Cycle Theory of consumption? Briefly explain.

This is not consistent with the Life-Cycle Theory. According to the Life-Cycle Theory, consumers spread out the rise in income (such as a tax rebate) over the rest of their lives, instead of spending it all now.

2.3 The article argues that further tax rebates would increase the budget deficit without much offsetting benefit. Briefly explain the two counteracting effects that a tax rebate would have on the budget deficit.

A tax rebate would immediately increase the budget deficit one-to-one. The second, counteracting, effect operates through the tax multiplier and the deficit response index. A tax rebate causes GDP to increase. Higher output then lowers the deficit (according to the deficit response index).