Assignment 3

Part A  Multiple-Choice Questions  [30 marks]

Each question is worth 2 marks. There is no negative marking for wrong answers

To answer each question correctly, you have to choose the best answer from the given four choices.

1. The aggregate demand curve is:
   A) vertical if full employment exists.
   B) horizontal when there is considerable unemployment in the economy.
   C) downward sloping because of the interest-rate, wealth or real balances, and foreign trade effects.
   D) downward sloping because production costs decrease as real output increases.

2. The interest rate effect indicates that a(n):
   A) decrease in the price level will increase the demand for money, increase interest rates, and decrease consumption and investment spending.
   B) decrease in the price level will decrease the demand for money, decrease interest rates, and increase consumption and investment spending.
   C) increase in the price level will increase the demand for money, reduce interest rates, and decrease consumption and investment spending.
   D) increase in the supply of money will increase interest rates and decrease interest-sensitive consumption and investment spending.
3. Which of the diagrams below best portrays the effects of an increase in consumer spending?

A) A  
B) B  
C) C  
D) D
Use the following to answer question 4:

The following table is for a particular country in which C is consumption expenditures, I\textsubscript{g} is gross investment expenditures, G is government expenditures, X is exports, and M is imports. All figures are in billions of dollars.

<table>
<thead>
<tr>
<th>Price level</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7) Real GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>128</td>
<td>$18</td>
<td>$2</td>
<td>$3</td>
<td>$1</td>
<td>$5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>20</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>22</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>24</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>116</td>
<td>26</td>
<td>10</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Refer to the above table. Which of the following schedules constitutes aggregate demand in this country?

- (A) column A
- (B) column B
- (C) column C
- (D) column D

5. An increase in taxes will cause a(n):
   A) decrease in the quantity of real domestic output demanded.
   B) increase in the quantity of real domestic output demanded.
   C) decrease in aggregate demand.
   D) increase in aggregate demand.
6. Which of the above diagrams best portrays an improvement in business profit expectations?
   A) A
   B) B
   C) C
   D) D

7. Which of the above diagrams best portrays the effects of declines in the incomes of other major nations with whom we trade?
   A) A
   B) B
   C) C
   D) D

8. The long-run aggregate supply curve is vertical:
   A) because the rate of inflation is steady in the long run.
   B) because resource prices eventually catch up with product prices.
   C) because product prices always increase at a faster rate than resource prices.
   D) only when the money supply increases at the same rate as real GDP.
9. Other things being equal, a reorganization of the OPEC cartel to permit it to increase world oil prices by 70 percent would most likely have which effect?
A) It would shift the aggregate demand curve right.
B) It would shift the aggregate supply curve right.
C) It would shift the aggregate supply curve left.
D) It would shift the aggregate demand curve right and the aggregate supply curve left.

Use the following to answer questions 10-11:

10. Refer to the above diagram. Assume that nominal wages initially are set on the basis of the price level $P_2$ and that the economy initially is operating at its full-employment level of output $Q_f$. In the short run, demand-pull inflation could best be shown as:
A) a move from b to c on AS$_2$.
B) a move from b to c to d.
C) a change of aggregate supply from AS$_2$ to AS$_3$.
D) a move from b to d.

11. Refer to the above diagram. Assume that nominal wages initially are set on the basis of the price level $P_2$ and that the economy initially is operating at its full-employment level of output $Q_f$. In the long run, demand-pull inflation could best be shown as:
A) a move from b to c on AS$_2$.
B) a move from b to f to d.
C) a change of aggregate supply from AS$_2$ to AS$_1$.
D) a move from b to d.
12. Collective bargaining agreements that prohibit wage cuts for the duration of the contract contribute to:
   A) a wealth effect.
   B) a multiplier effect.
   C) an increase in aggregate supply.
   D) a price level that is inflexible downward.

13. Wage contracts, efficiency wages, and the minimum wage are explanations for why:
   A) competition results in price wars.
   B) wages tend to be inflexible downward.
   C) the aggregate demand curve slopes downward.
   D) there is little support for the existence of a real-balances effect.

14. Cost-push inflation arises from:
   A) a decrease in aggregate demand.
   B) a decrease in aggregate supply.
   C) an increase in aggregate demand.
   D) an increase in aggregate supply.
15. Refer to the above diagrams. A decline in aggregate expenditures from AE₂ to AE₁ resulting from the wealth, interest rate, and foreign trade effects would be depicted as:

A) a movement from A to B along aggregate demand curve AD₁.
B) a movement from B to A along aggregate demand curve AD₁.
C) a shift of aggregate demand from AD₁ to AD₂.
D) a shift of aggregate demand from AD₂ to AD₁.
Part B    Problem Solving Questions    40 marks

Answer all parts of the following three questions.

B-1    20 marks

What effects would each of the following have on aggregate demand or short-run aggregate supply? In each case use a diagram to show the expected effects on the short-run equilibrium price level and level of real output. Assume that all other things remain constant.

a. A widespread fear of depression on the part of consumers.

b. A $2 increase in the excise tax on a pack of cigarettes.

c. A reduction in interest rates at each price level.

d. A major increase in federal spending for health care.

e. The expectation of rapid inflation.

f. The complete disintegration of OPEC, causing oil prices to fall by one-half.

g. A 10 percent reduction in personal income tax rates.

h. A sizable increase in labor productivity (with no change in nominal wages).

i. A 12 percent increase in nominal wages (with no change in productivity).

j. Depreciation in the international value of the dollar.

B-2    20 marks

Suppose the full employment level of real output ($Q$) for a hypothetical economy is $250 and the price level ($P$) initially is 100. Use the short-run aggregate supply schedules below to answer the questions which follow:

<table>
<thead>
<tr>
<th>$P$</th>
<th>$Q$</th>
<th>$P$</th>
<th>$Q$</th>
<th>$P$</th>
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<td>75</td>
<td>250</td>
</tr>
</tbody>
</table>

a. What will be the level of real output in the short run if the price level unexpectedly rises from 100 to 125 because of an increase in aggregate demand? What if the price level falls unexpectedly from 100 to 75 because of a decrease in aggregate demand? Explain each situation, using numbers from the table.

b. What will be the level of real output in the long run when the price level rises from 100 to 125? When it falls from 100 to 75? Explain each situation.

c. Show the circumstances described in parts a and b on a graph, and derive the long-run aggregate supply curve.