First Midterm Exam

Time: 90 minutes (14:00 -15:30)

Part A. Multiple Choice Questions (5 points each)

1. What is *stagflation*?
   a. Stagflation means high inflation accompanied by low unemployment.
   b. Stagflation means low inflation accompanied by high unemployment.
   c. Stagflation means high inflation accompanied by high unemployment.
   d. Stagflation means low inflation accompanied by low unemployment.

2. Which of the following is counted in GDP?
   a. The fee paid to a broker for selling a stock.
   b. The sale of an old house.
   c. The sale of stocks and bonds.
   d. The sale of a used car.

3. The increase in unemployment that occurs during recessions and depressions is called:
   a. Cyclical unemployment.
   b. Structural unemployment.
   c. Natural unemployment
   d. Frictional unemployment.

4. The *real rate of interest* equals:
   a. The interest rate on a loan divided by the inflation rate.
   b. The interest rate on a loan plus the inflation rate.
   c. The interest rate on a loan times the inflation rate.
   d. The interest rate on a loan minus the inflation rate.

5. In our simple economy \(Y = C + I\), the size of the multiplier depends on:
   a. The marginal propensity to consume.
   b. The magnitude of changes in an autonomous variable.
   c. The magnitude of changes in aggregate output (income).
   d. Aggregate expenditure.
6. What happens when there is a simultaneous increase in government spending of $100 and a lump-sum tax of $100?

   a. Nothing happens. Equilibrium income remains the same because the amount of government spending (G) is compensated by the amount of taxation (T).
   b. Equilibrium income would increase by $100, or the amount of increase in G.
   c. Equilibrium income would decrease by $100, or the amount of increase in T.
   d. Equilibrium income would decrease by $200, or double the amount of the increase in T.

7. Which of the following is an expression for the budget deficit?

   a. \( Y - T \)
   b. \( C + I + G \)
   c. \( G - T \)
   d. \( C + S + T \)

8. In equilibrium, leakages must equal planned injections. Algebraically, this means that:

   a. \( Y = (S + T) \)
   b. \( AE = (I + G) \)
   c. \( (S + I) = (G + T) \)
   d. \( (S + T) = (I + G) \)

**Part B. Problems and Essay Questions**

1. (30 points) Suppose that the government of Lumpland is enjoying a budget surplus with fixed government expenditures of \( G = 150 \) and fixed taxes of \( T = 200 \). Assume that the consumers of Lumpland behave according to the following consumption function: \( C = 150 + 0.75(Y-T) \). Suppose further that investment spending is fixed at 100.

   a. Calculate the equilibrium level of GDP. (Hint: At equilibrium GDP = \( Y = AE = C + I + G \))

   b. Calculate the equilibrium levels of Consumption (C) and Saving (S).
c. Assume that the Congress of Lumpland decreases taxes by 20 to a new fixed level of 180. Recalculate the equilibrium level of GDP either by using the tax multiplier or by using \( Y = AE \) equation.

d. What are the new equilibrium levels of Consumption (C) and Saving (S).

e. Draw the AE graph and show the effect of the tax cut. Label the both axes, show where the AE curve intersects the y-axis and the 45-degree line both at the old and at the new equilibrium.
2. (20 points) Assume an economy with only two goods in a two period framework.

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
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<th>2006</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Price</td>
<td>Quantity</td>
</tr>
<tr>
<td>Good A</td>
<td>100</td>
<td>10 YTL</td>
<td>150</td>
</tr>
<tr>
<td>Good B</td>
<td>200</td>
<td>5 YTL</td>
<td>200</td>
</tr>
</tbody>
</table>

a. What is nominal GDP in 2005?

b. What is nominal GDP in 2006?

c. What is the real GDP growth rate from 2005 to 2006?

d. What is the GDP deflator (change in overall price levels) if the base year is 2005?

3. What are the limitations of the concept of GDP?

Bonus: Who is the current governor of the Central Bank of Turkey?