# MODEL IS-LM-BP (open economy)

	SYSTEM OF FIXED EXCHANGE RATE	SYSTEM OF FLOATING EXCHANGE RATE
Net exports	NX = EX - IMa - m*Y	$NX = EX - IMa - m^*Y + v^*R$
AD curve equation	$AD = Ca + mpc*(Y - Ta - t*Y + TR) + \bar{I}$ - b*i + G + EX - IMa - m*Y	AD = Ca + mpc*(Y - Ta - t*Y + TR) + $\bar{I}$ - b*i + G + EX - IMa - m*Y + v*R
	AD = A + [mpc *(1 - t) - m]*Y - b*i	AD = A + [mpc*(1 - t) - m]*Y -b*i + v*R
IS curve equation	Y = Ca + mpc*Y - mpc*Ta - mpc*t*Y + mpc*TR + I - b*i + G + EX - IMa -m*Y	Y = Ca + mpc*Y - mpc*Ta - mpc*t*Y + mpc*TR + Ī - b*i + G + EX - IMa -m*Y + v*R
	$Y = \alpha_4 * (A - b*i)$	$Y = \alpha_4 * (A - b*i + v*R)$
Equilibrium product	YE = α <sub>4</sub> * (A - b*i)	$YE = \alpha_4 * (A - b*i + v*R)$

## **PROBLEM 1:**

Assume that the economy is described by following features: Ca=100,  $\bar{I}$ =100, G=100, Ta=30, TR=10, M/P=300, mpc=0,8, t=0,2, b=10, k=0,5 h=30.

Additional information for open economy are: v=20, EX = 100, m = 0,2.

- a) Write down the equations of IS and LM curves in closed economy.
  - I) What is the equilibrium product?
  - II) What is the equilibrium interest rate?
- b) Is this economy using the system of floating or fixed exchange rates?
- c) What is the equation of net exports?
- d) Write down the new equations of IS and LM curves in open economy.
- f) Calculate the new values of equilibrium product and interest rate for R = 1.
- g) Calculate the new values of equilibrium product and interest rate for R=1,2

## **PROBLEM 2:**

Draw the graph of IS-LM-BP model in case of perfect capital immobility and explain.

### **PROBLEM 3:**

- 1) Draw the graph of IS-LM-BP model in case of perfect capital mobility and explain.
  - a) Now consider the effect of fiscal expansion in the system of fixed exchange rate. Discuss and draw the grapf.
  - b) Now consider the effect of monetary restriction in the system of fixed exchange rate. Discuss and draw the grapf.
  - c) Now consider the effect of fiscal expansion in the system of flexible exchange rate. Discuss and draw the grapf.

## **PROBLEM 4: TRUE OR FALSE**

- 1. Net exports are negatively influenced by real domestic product.
- 2. The decrease of interest rate in money market can be caused by increased demand for bonds.
- 3. Real depreciation of domestic currency increases the volume of planned aggregate expenditure and thus shifts the IS curve to the right.
- 4. The decrease of nominal money supply increases interest rate which will result in the shift of LM curve up.
- 5. In IS-LM-BP model the real depreciation of domestic currency is caused by nominal depreciation of domestic currency, decrease of domestic price level, increase in foreign price level or combination of all of these.
- 6. The decrease in interest rate sensitivity of money demand will shift the LM curve upwards.