HOCHSCHULE PFORZHEIM **– Faculty of Economics and Law –** **- Written Examination Example 1 -**	
Department: Economics	
Subject: International Economics	**Semester:**
	Date:
Examinant:	**Prof. Dr. Rainer Maurer**
Time:	**60 Minutes**
Auxiliary Means:	**Dictionary, Non-Programmable Calculator**

Notes:

(1) Please check the number of sheets and questions for completeness. You should find 7 questions and 6 sheets (inclusive the front page).

(2) Please use these sheets to answer the questions. **If you need more space, use the back of the preceding page!** Should these not be sufficient, use additional sheets and staple them at the end. Please take care for a correct numbering of all additional sheets.

(3) A correct answer yields the number of points noticed in the side column of each question. To pass the examination 50% of all available points have to reached (= 30 Points).

(4) Please give complete and comprehensible answers. Illegible answers cannot be accepted.

(5) If you use charts, please take care for a complete labeling.

Name: _____

Matriculation-Number: _____

Result: _____

1. Explain the influence of the central bank on the exchange rate via the purchasing power parity channel.	15	

The purchasing power parity channel influences the exchange rate over its long run effect on the domestic price level. Since the domestic price level is relatively rigid over a period of about 1 year, this channel does not act in the short term but only in the long term. It explains why, in the long run, countries with strong inflation have a weak, i.e. constantly depreciating, currency.

If the central bank raises e.g. the domestic real money supply $M\uparrow/P$, the credit supply increases.

=> Decrease in the domestic capital market rate: $i_€ \downarrow$

=> Increase in capital goods demand: $I \uparrow$

=> Increase in consumption goods demand: $C \uparrow$

=> Interest arbitrage caused devaluation of the domestic currency:

$$e^{\$}_{€} \downarrow = \left((1+i_€\downarrow)/(1+i_\$) \right) * f^{\$}_{€} \downarrow$$

*=> Domestic goods cheaper as foreign goods: $P_€ * e^{\$}_{€} \downarrow < P_\$$*

=> Increase in domestic exports: $X \uparrow$

=> Decrease in domestic imports: $M\downarrow$

=> Increase in demand for domestic goods: $Y_D\uparrow = C\uparrow + I\uparrow + X\uparrow - M\downarrow$

=>Excess demand for domestic goods: $Y_D > Y_S$

=> Increase of the domestic price level (=inflation): $P_€ \uparrow$

=> Decrease in domestic real credit supply: $(M / P_€ \uparrow) \downarrow$

=> Increase in domestic interest rate: $i_€\uparrow$

=> Disappearance of domestic excess demand:

$$Y_D\downarrow = C\downarrow + I\downarrow + X\downarrow - M\uparrow$$

=> Return to purchasing power parity:

$$P_€ \uparrow * e^{\$}_{€} \downarrow = P_\$$$

*//=> New market equilibrium with higher price level $P_€ \uparrow$ and devalued exchange rate $e^{\$}_{€} \downarrow$.The purchasing power parity holds in the end again, because the domestic price level grows to the same degree with which the domestic exchange rate decreases: $P_€ \uparrow * e^{\$}_{€} \downarrow = P_\$$.*

2. Explain how a company can hedge the exchange rate risks from foreign trade with a foreign currency credit. *Example: Production of a car with production costs of € 10000 for the US market at an agreed price of $ 20,000 for delivery one month ahead at an exchange rate of 2 $/€. => If the € would appreciate to 4 $/€, for example, the proceeds would equal € 5000, which is insufficient to cover the production costs.* *Solving this problem through a foreign currency credit: taking a $ 20000 credit and immediately exchanging these dollars for € 10000. Thus the receipt of the payment is secured at the spot exchange rate of 2 $/€. Now, the incoming $ 20,000 one month ahead can be used to pay back the $ credit, no matter what spot exchange rate prevails one month ahead.*	6	
3. Explain what implications a government subsidy for domestic savings has in a closed economy compared to an open economy? *Since savings in closed economies cannot flow abroad, domestic investments always equal domestic savings. As a result of government subsidies for domestic savings the investment also increases such that the closed economy reaches a higher steady state level of GDP.* *In contrast, savings can also be invested abroad in an open economy. As a result, government subsidies for savings will not necessarily increase domestic investment. An increase in the steady state level of GDP does therefore not necessarily result if the government subsidies savings.*	5	

4. Explain why not only inter-industrial trade but also intra-industrial trade can emerge between two countries. *Inter-industrial trade occurs between countries with different comparative advantages. Under free trade, a country exports goods for which it has a comparative advantage and imports goods where it has comparative disadvantages.* *Intra-industrial trade occurs when production technologies are characterized by economies of scale. Then the companies with the highest production volumes can have the lower average costs - even if there are no comparative advantages. These companies export their products abroad.* *Since a company in country A may have the highest production volume for one particular product and a company in country B may have the highest production volume for another particular product, country A and country B engage both in international trade within the same industry even so they are completely identical.*	10	
5. Explain the Stolper/Samuelson Theorem and explain how international trade can affect the income distribution in **developed** countries according to this theorem. *According to the Stolper/Samuelson theorem, free trade increases the remuneration of the relatively abundant production factor in a country, while the remuneration of the relatively scarce production factor decreases. This theorem can be derived from the Heckscher/Ohlin theorem, according to which under free trade such goods are exported, which use the relatively abundant production factors more intensively. Therefore, the demand for the relatively abundant production factor grows under free trade. As the result its remuneration rises. For the relatively scarce production factor, the opposite is the case.* *According to the Stolper/Samuelson theorem, free trade can cause greater inequality in the income distribution of a developed country: Under free trade, skilled (high-income) workers receive even higher incomes, because more goods that require skilled labor are exported. At the same time low-skilled (low-income) workers receive lower incomes, because the production of goods that are mainly produced by low-skilled workers decreases.*	10	