Examination: (1557) European Integration **Wintersemester: 2003/2004**
Examiner: Dr. G. Groh
The following aids can be used: Dictionary

Student number: _____ Faculty: _____

Name: _____ First name: _____

Date: _____

Important hints:

- This exam consists of 25 questions.
- General rule for all questions: From the 4 given answer proposals, exactly one is correct.
- Valuation:
  - correct answer: 1 point
  - no answer: 0 points
  - wrong or more than one answer: $-\frac{1}{3}$ point
- The intersection point of the crosses has to be *within* the boxes, not outside (☒ instead of ×☐). Crosses outside the boxes will *not* be counted!
- Use a ball-point pen or s.th. similar but *not* a lead pencil!
- If you have made a cross at the wrong alternative and want to correct it, please write this plainly at the margin beside the question.
- Time available: 60 minutes.

1. The following statement is true:

   - ☐ Greece entered the European Community in 1981 and the European Monetary Union in 2001.
   - ☐ Great Britain entered the European Community and the European Monetary System in 1973.
   - ☐ Austria, Finland and Sweden entered the European Union in 1995 and the European Monetary Union in 1999.
   - ☐ Italy was a founding member of the European Coal and Steel Community (ECSC) and joined the European Monetary System in 1973.

2. The "Assembly" of the former ECSC was a precursor of the later

   - ☐ European Commission.
   - ☐ Council of Ministers.
   - ☐ European Parliament.
   - ☐ Committee of Permanent Representatives (COREPER).

3. The European Monetary Institute (EMI)

   - ☐ was the clearing unit of the European Payment Union.
   - ☐ is an autonomous EU-body that grants credits for projects of common interest, mainly in less developed regions.
   - ☐ was founded in conjunction with 'step 2' of the Maastricht Treaty in order to prepare the creation of the monetary union and the European Central Bank.
   - ☐ was founded together with the European Monetary System in order to support the national central banks to defend the bands of fluctuation.

4. Nowadays, the EFTA consists of the following countries:

   - ☐ Norway, Andorra, Iceland, Switzerland.
   - ☐ Iceland, Switzerland, Norway, Liechtenstein.
   - ☐ Switzerland, Norway, San Marino, Malta.
   - ☐ Norway, Iceland, Andorra, Liechtenstein.

5. One of the main competencies of the European Commission is

   - ☐ the final decision concerning treaties with other countries.
   - ☐ the right to propose new legislation initiatives for the EU.
   - ☐ the right to raise taxes to finance investments in common interest.
   - ☐ the final decision on the budget of the EU.

6. The "cooperation"-procedure between the Council of Ministers and the European Parliament (EP)

- ☐ was introduced by the Single European Act and allowed the EP to amend legislation.
- ☐ was introduced by the Treaty on European Union and gave the EP the power to reject a legislation proposal.
- ☐ was introduced by the Treaties of Rome and gave the EP the power to reject a legislation proposal.
- ☐ was introduced by the Treaty of Amsterdam and requires only an opinion of the EP in the EU-legislation process.

7. The Council of Ministers is accountable

- ☐ to the European Commission.
- ☐ to the European Parliament.
- ☐ to the European Commission as well as to the European Parliament.
- ☐ neither to the European Commission nor to the European Parliament.

8. The following statement is correct:

- ☐ In the Treaty on European Union ("Maastricht-Treaty") the "convergence criteria" for entry into the European Monetary Union were formulated and the new currency was given the name "Euro".
- ☐ The third 'pillar' of the Treaty on European Union ("Maastricht-Treaty") is concerned with "Justice and Home Affairs".
- ☐ Voting by qualified majority in the Council of Ministers was first introduced by the Treaty of Amsterdam.
- ☐ On the Summit of Madrid the final decision about membership in the European Monetary Union was taken.

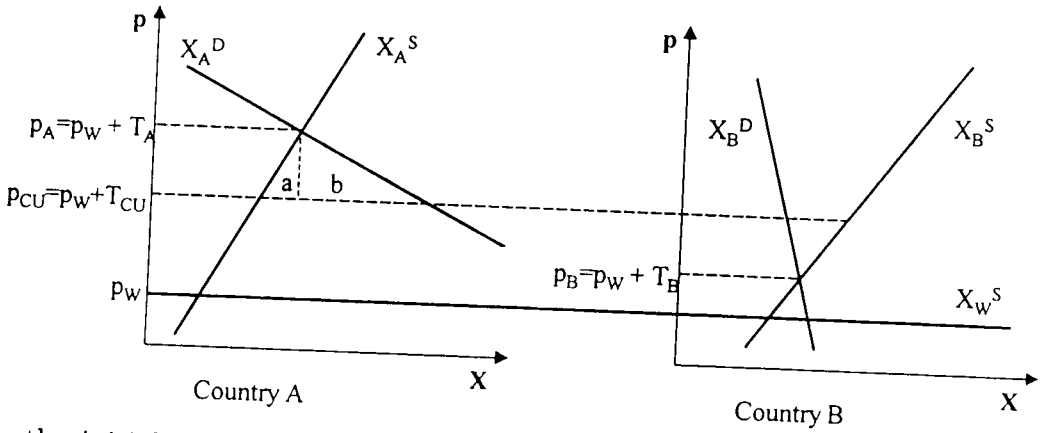
9. The judges and advocates-general of the European Court of Justice are appointed

- ☐ by common accord of the governments of the member states.
- ☐ by a decision of the Council of Ministers, taken by qualified majority.
- ☐ by a unanimous decision of the European Commission.
- ☐ by a proposal of the European Commission and a final decision of the European Parliament (by simple majority).

10. The "Fourth Resource" is

- ☐ part of the expenditures of the EU-budget and is used for the preparation of the Eastern Enlargement.
- ☐ part of the revenues of the EU-budget and consists of member states' contributions related to their GNP.
- ☐ part of the revenues of the EU-budget and consists of member states' contributions based on value-added-tax.
- ☐ part of the revenues of the EU-budget and is based on customs duties on imports from non-EU-countries.

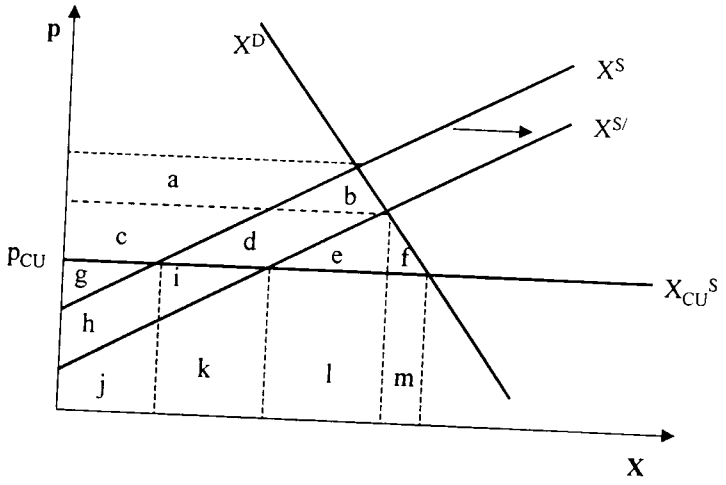
11. Have a look at the following picture:



In the initial situation (prior to the formation of a customs union between A and B) the tariffs T_A and T_B are chosen slightly above the autarky price of each country so that approximatly $p_W + T_A = p_A$ and $p_W + T_B = p_B$ holds true. Following a former practice applied in the EC, country A and country B choose the average of their previous national tariffs (T_A and T_B) as the common external tariff T_{CU} $(= 0.5 \cdot (T_A + T_B))$ for their customs union. Should tariff revenues actually arise, assume for sake of simplicity, that they are shared between the two countries. If now the supply- and demand-curves have *precisely* the slope and the location as drawn in the above picture, for the situation after the creation of the customs union the following statement is true:

- ☐ Country A will cover its excess demand by imports partly from the world market and partly from the partner country B. The total welfare gain for country A exceeds the trade-creation effect in a broad sense (i.e. welfare gain $> a + b$).
- ☐ Country A will cover its entire excess demand by imports from partner country B. Due to a trade-diversion effect, the total welfare gain for country A is smaller than the trade-creation effect in a broad sense (i.e. welfare gain $< a + b$).
- ☐ Country A will cover its excess demand by imports partly from the world market and partly from the partner country B. The total welfare gain for country A is equal to the trade-creation effect in a broad sense (i.e. welfare gain $= a + b$).
- ☐ Country A will cover its entire excess demand by imports from the world market. The total welfare gain for country A is equal to the trade-creation effect in a broad sense (i.e. welfare gain $= a + b$).

12. Have a look at the following small member country of a customs union:



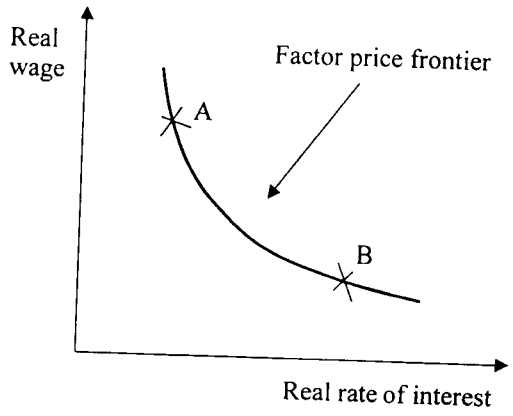
Due to increased competitive pressure after the entry into the customs union "hidden efficiency reserves" are activated which result in cost reductions and a corresponding shift the country's supply curve to the right ($X^S \rightarrow X^{S/}$). The common external tariff T_{CU} is assumed to be high enough to ensure that $p_w + T_{CU}$ is well above p_{CU}. In comparison to the situation prior to this shift (*but with the customs union already existing!*) the following statement is correct:

- ☐ The domestic producers' revenues increase by $i + k$ and their costs increase by k. There is no change in consumers' surplus.
- ☐ The domestic producers' revenues increase by $c + d + e + i + k + l$ and their costs increase by $k + e + l$. The consumers' surplus increases by $a + b$.
- ☐ The domestic producers' revenues increase by $c + d + e + l$ and their costs increase by $k + e + l$. The consumers' surplus increases by $c + d + e + f$.
- ☐ The domestic producers' revenues increase by $i + k$ and their costs increase by $k - h$. There is no change in consumers' surplus.

13. In a 2-country model with 2 goods and 2 production factors (labour and capital) the following statement is correct:

- ☐ In any case, the mobility of one production factor between the two countries is sufficient for factor price equalization to occur between these countries.
- ☐ Under certain circumstances, factor price equalization between the two countries can be achieved even without any factor mobility between these countries at all.
- ☐ Factor price equalization between the two countries always requires the mobility of both production factors between these countries.
- ☐ For factor price equalization between the two countries to occur, the mobility of at least one production factor between these countries is necessary.

14. Have a look at the points A and B, lying on the same factor price frontier, and assume an underlying Cobb-Douglas production function $Y = \gamma K^{\alpha} L^{1-\alpha}, \quad 0 < \alpha < 1$.



Then the following statement is true:

- ☐ In point B the output-capital-ratio (Y/K) is higher in comparison to point A, but the value of the parameter γ is the same.
- ☐ In point B the output-capital-ratio (Y/K) is smaller in comparison to point A, but the value of the parameter γ is the same.
- ☐ In point B the output-capital-ratio (Y/K) and the value of the parameter γ are both higher in comparison to point A.
- ☐ In point B both the output-capital-ratio (Y/K) and the parameter γ have the same value as in point A.

15. With regard to the capital market integration within the EU (or former EC, respectively) the following statement is true:

- ☐ There has been a large net flow of direct investment from "periphery countries" like Spain, Portugal and Greece to "core-countries" like France, UK, Italy and Germany.
- ☐ For a long time, this integration was incomplete and and national restrictions continued to exist.
- ☐ Capital movements between the EU-countries have largely been substituted by a high degree of labor mobility.
- ☐ Full capital market liberalization between the founding members of the EC was already achieved together with the abolition of tariffs.

16. The "Governing Council" of the European Central Bank (ECB) consists of

- ☐ the president and the vice-president of the ECB and the governors of the central banks of all member states of the EU.
- ☐ the president and the vice-president of the ECB and four other members as well as the governors of the central banks of all member states of the EU.
- ☐ the president and the vice-president of the ECB and four other members.
- ☐ all members of the Executive Board and the governors of the central banks of the member states which have adopted the Euro.

17. Consider the 2-country-version of the Barro-Gordon-model. Assume that

- the central bank of country A is governed by a "hard-nosed" central banker with the following loss function : $L_A = (\hat{p}_A - \hat{p})^2 \quad (1)$, whereas
- the central bank of country B is governed by a "wet" central banker with the following loss function : $L_B = (\hat{p}_B - \hat{p})^2 + \beta(U_B - U)^2, \quad \beta > 0 \quad (2)$.

The variable $\hat{p}$ denotes the actual rate of inflation, whereas $\hat{p}_A$ and $\hat{p}_B$ are the corresponding target values of country A and B, respectively. Assume that $\hat{p}_B > \hat{p}_A$ holds true. In a similar way U denotes the actual rate of unemployment, wheres U_B is the rate preferred by country B. It is assumed that $U_B < \bar{U}$ with $\bar{U}$ denoting the NAIRU (Non-accelerating-inflation rate of unemployment). Assume furthermore, that both countries face the same (expectations-augmented) Phillips-curve: $\hat{p} = \alpha(\bar{U} - U) + \hat{p}^e, \quad \alpha > 0$, where $\hat{p}^e$ denotes the expected rate of inflation.

Now assume, that country B wants to reduce its inflation rate and that it can choose among the following three options to do so:

a) To appoint a new and "more conservative" leader for its central bank with a loss function $\tilde{L}_B = (\hat{p}_A - \hat{p})^2 + \beta(U_B - U)^2, \quad \beta > 0$. (Thus, in contrast to equation (2), the new target rate of inflation is now the smaller rate $\hat{p}_A$ instead of $\hat{p}_B$.)

b) To form a monetary union with country A with the common central bank consisting of representatives of both countries.

c) To form a monetary union with country A with the central bank of country A taking over.

Then for the resulting new long-run equilibrium the following statement is true:

☐ The rate of inflation in case a) is larger than in case c), but the rate of unemployment in case a) is smaller than in case c).

☐ The rate of inflation in case a) is equal to that in case c), and the rate of unemployment in case a) is equal to that in case c), too.

☐ The rate of inflation in case b) can be equal to that in case c), and the rate of unemployment in case b) is always equal to that in case c).

☐ The rate of inflation in case b) is always larger than in case c), but the rate of unemployment in case b) is smaller than in case c).

18. Recall the aggregate demand curve of a country in conjunction with the theory of optimum currency areas. A downward shift of this curve can be caused by

☐ a devaluation of the country's currency.

☐ an appreciation of the country's currency.

☐ an increase of another country's price level.

☐ an increase in the country's own price level.

19. Assume, that all member countries of the European Monetary Union (EMU) are hit by a negative demand shock, which shifts demand away from European products in favour of US-products. According to the theory of optimum currency areas, the following view is correct:

- ☐ Due to their common currency, the member states of the EMU will remain in a situation of increased unemployment (above the "natural rate") and a current account deficit with the USA. The only way out is another exogenous shock that works in the opposite direction.
- ☐ Due to the common currency within the EMU, the only way to restore the current account equilibrium with the USA and the original levels of unemployment in the EMU-countries is to significantly increase wage flexibility or labor mobility within the EMU.
- ☐ The common currency and the lack of labor mobility and wage flexibility in the EMU-countries do not prevent their return to the previous levels of unemployment and the restoration of the current account equilibrium with the USA.
- ☐ The unemployment rates in the EMU can return to their original levels, but due to the common currency the current account deficits of the EMU-countries with the USA cannot be overcome.

20. Consider the government's budget constraint:

$$G - T + rB = \dot{B} + \dot{M}$$

with G denoting nominal government expenditure, T the nominal tax revenues, r the nominal rate of interest, B the current nominal level of government debt and M the money supply. Dots over the variables indicate the derivative with regard to time. Let now Y denote the nominal GDP and $b = B/Y, \quad g = G/Y, \quad t = T/Y$. The dynamic equation for the evolution of the debt-to-GDP-ratio b can then be written as:

- ☐ $\dot{b} = (t - g) + (r - \dot{Y}/Y)b - \dot{M}/Y$
- ☐ $\dot{b} = (g - t) + (r - \dot{Y}/Y)b - \dot{M}/Y$
- ☐ $\dot{b} = (g - t) + (r - \dot{Y}/Y)b + \dot{M}/Y$
- ☐ $\dot{b} = (g - t) - (r - \dot{Y}/Y)b - \dot{M}/Y$

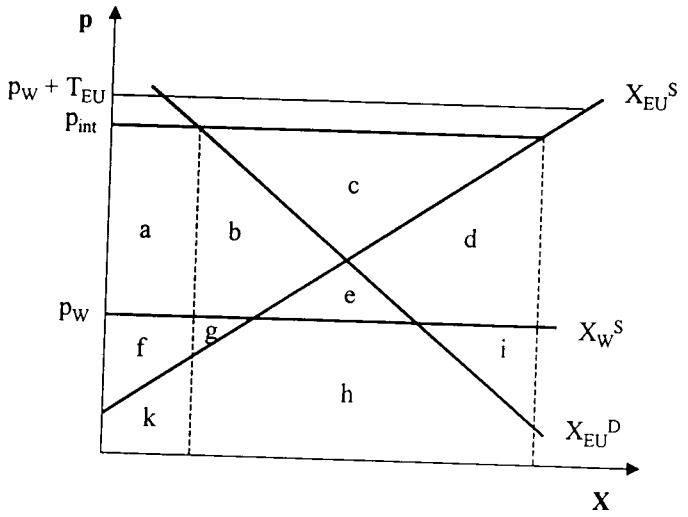
21. Assume, that in contrast to the "60 % - rule" a member country of the EU would desire to stabilize its debt-to-GDP-ratio at 40 % without any aid from money creation. Assume furthermore, that a constant rate of inflation of 3 % and a constant growth rate of real output equal to 2 % prevail, that the nominal rate of interest is equal to 7 % and that the desired debt-to-GDP-ratio has already been achieved. In order to maintain this ratio,

- ☐ a primary surplus $(T - G)$ of 2 % of GDP is required.
- ☐ a total surplus $(T - G - rB)$ of 2 % of GDP is required.
- ☐ a primary deficit $(G - T)$ of 2 % of GDP is required.
- ☐ a total deficit $(G - T + rB)$ of 2 % of GDP is required.

22. In order to meet the "debt-criterion" of the "Maastricht-Treaty", a candidate country for the EMU tries to reduce its debt-to-GDP-ratio (B/Y) by cutting its government expenditures G. In the short-run, this measure will have the following effect:

- ☐ The debt-to-GDP-ratio (B/Y) will decrease under all circumstances.
- ☐ The debt-to-GDP-ratio (B/Y) can also rise, but only if the reduction in G is of insufficient size, so that there is still a primary deficit and the debt level (B) does not fall.
- ☐ The debt-to-GDP-ratio (B/Y) can also rise, even if the cut in G is successful in reducing the level of the debt $(B \downarrow)$.
- ☐ The debt-to-GDP-ratio (B/Y) can only be prevented from rising, if new money is issued.

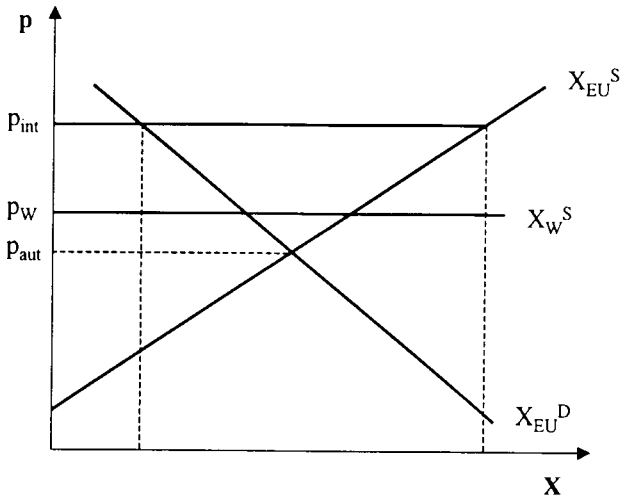
23. Have a look at the following picture, which describes the situation on the market for an agricultural good X in the EU:



Let p_w denote the world market price for this product and T_{EU} the common external tariff levied by the EU on potential imports. Furthermore p_{int} is the intervention price guaranteed to EU-producers in conjunction with the Common Agricultural Policy. Assume, that surpluses can be sold by the intervention authorities on the world market at price p_w. In comparison to a situation of fully free trade (including third-party countries) this policy leads to certain welfare changes. Taking these changes in EU-consumers' surplus, EU-producers' surplus and the costs for the intervention authorities together, the total change in welfare for the EU as a whole is equal to

- ☐ a gain of $f + g - b - 2e - d$
- ☐ a loss of $b + d$.
- ☐ a loss of $b + 2e + d + g + h + i$.
- ☐ a loss of $b + 2e + d$.

24. Now assume the following constellation on the market for an agricultural product in the EU:



Once again, p_{int} is guaranteed to EU-producers, p_w is the world market price and p_{aut} denotes the autarky price for the EU. In the above situation, an excess supply would also occur in the absence of the Common Agricultural Policy (CAP), with the EU-countries being net-exporters also in this case. For a proper functioning of the CAP in form of the above "intervention-buying" under these conditions, an import levy for the good under consideration

- ☐ is superfluous.
- ☐ of at least $p_{int} - p_{aut}$ is necessary.
- ☐ of at least $p_{int} - p_w$ is necessary.
- ☐ of at most $p_w - p_{aut}$ is sufficient.

25. In conjunction with the Common Agricultural Policy of the EU the following statement is correct:

- ☐ Milk quotas have already been introduced prior to the "MacSharry-reforms".
- ☐ The reforms developed in the "Mansholt-Plan" were implemented in 1968.
- ☐ "Set-aside-premia" for arable land have firstly been introduced by the 1999-reforms (in conjunction with the "Agenda 2000").
- ☐ The system of guaranteed prices was completely abolished in conjunction with the 1999-reforms ("Agenda 2000").