KÖZGAZDASÁGI
ALAPISMERETEK
(ELMÉLETI GAZDASÁGTAN)
ANGOL NYELVEN

KÖZÉPSZINTŰ
ÍRÁSBELI VIZSGA

2013. május 23. 8:00

Az írásbeli vizsga időtartama: 180 perc

Pótlapok száma
Tisztázati
Piszkozati

EMBERI ERŐFORRÁSOK
MINISZTÉRIUMA
**Important information**

The test sheet is complex, broken down into sections according to the different types of questions. When working out the solution, please take into account the additional information in *italic font*. Please follow the instructions when answering the questions. Maximum score will only be given, if all subsections of the question have been answered.

Solutions and elaborations should be written on the test sheet. All drafts should be written on the additional pages provided. If the answer requires additional pages, please indicate this next to the relevant question. Pencils may be used to draw diagrams, the final solution, however; has to be finalised in pen.
Please use a ruler to draw precise diagrams.
You may only use non-programmable calculators during the written examination.

Good luck with your examination!
I. Test Questions

Multiple choice questions (2 x 10 = 20 points)

We have provided four possible answers that correctly complete the statements below, but only one of these answers is correct. The other answers are either partially correct or completely wrong. Choose the letter corresponding to the correct answer and write it into the table below, into the field corresponding to the given question number.

Attention! Only one answer will be accepted. No points will be awarded for multiple or unclear answers.

<table>
<thead>
<tr>
<th>Points scored</th>
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<tbody>
<tr>
<td>1.</td>
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1. It is typical of the operation of the market that
   a) if there is shortage on the market, prices increase.
   b) if there are too many buyers, fewer goods can be sold.
   c) if there are too many goods, prices increase.
   d) if the price of a good increases, buyers purchase even more.

2. The relationship of total utility and marginal utility is described by the following correlation:
   a) the difference of total utility and marginal utility is always zero.
   b) if marginal utility is zero, the total utility is at a maximum.
   c) if total utility is negative, then marginal utility decreases.
   d) All the above statements are correct.

3. The marginal product of labour is
   a) the quotient of total production and the number of people.
   b) the change in production divided by one.
   c) the quotient of the total product and the change in the number of people.
   d) the quotient of the change in production and the change in the number of people.

4. In the case of a perfectly competitive company
   a) marginal revenue is equal to market price.
   b) marginal cost is a permanent value in the short-run.
   c) the total profit function is a line that begins at the origin.
   d) the total revenue function has a maximum value.

5. The utilisation of a production factor is optimal when
   a) marginal cost is at a minimum.
   b) marginal cost is at a maximum.
   c) marginal cost is equal to marginal factor cost.
   d) None of the above statements are correct.

6. The budget has a deficit if
   a) the state’s expenditures exceed revenues.
   b) the state’s expenditures exceed transfer incomes.
   c) primary incomes are lower than derived incomes.
   d) None of the above.
7. The difference between GNI and GNDI depends on a number of factors. Such a factor is for example:
   a) intermediate consumption.
   b) government commodity purchase.
   c) transfers from abroad.
   d) depreciation.

8. Which of the following statements is true?
   a) Active population is always greater than labour supply.
   b) The sum of the inactive population and the employed population is equal to the working age population.
   c) The sum of the employed and unemployed population is equal to the active population.
   d) Active population is always greater than working age population.

9. Tax increase could have the result that in the economy
   a) aggregate demand increases.
   b) consumption demand decreases.
   c) budgetary deficit increases.
   d) available income also increases.

10. There is restrictive monetary policy, if the measure
    a) is aimed at moderating commodity market demand.
    b) serves to stimulate investment.
    c) has a decreasing effect on the interest rate.
    d) None of the above statements are correct.
II. Written (Elaborative) Questions

1. True-false statements (12 points)

Decide whether the statements below are true or false. Please indicate your decision by writing the letters T (true) or F (false) in front of the statements. Unclear markings or crossed out letters will not be accepted.

ATTENTION! ALL ANSWERS HAVE TO BE EXPLAINED. All correct explanations are worth 1 point.

1. Assuming there are identical income and cost conditions, compared to a perfectly competitive market a monopoly produces more therefore its selling price is also higher.  

   2 points

2. If the costs of living increase, employees are willing to take on more work for the same hourly wages.  

   2 points

3. A characteristic of public goods is that they can be consumed freely, without payment.  

   2 points

4. The GNDI is the indicator of gross national disposable income; therefore it does not include depreciation.  

   2 points

5. The application of a demand-stimulating economic policy has the risk of increasing inflation.  

   2 points

6. As a result of trade based on comparative advantages, consumption possibilities in countries participating in the division of labour expand.  

   2 points
2. Definitions (8 points)

Give a brief definition of the listed terms and economic phenomena.

A) Import function:

B) International balance of payments:

C) Fixed foreign exchange rate:

D) Euro:
3. Elaborative question (8 points)

Write down your answer, in which you name or list and explain the most important correlations in detail. Make sure your answer is clear, easy to understand, and structured according to content. Structure your answers in a way that corresponds to your main thoughts. If necessary, you may write down formulas or make diagrams.

Present the unique characteristics of the land market. Analyse the factors affecting economic rent. Prepare a graphic representation of the land market and explain why these functions are unique.
4. Complete the missing data (6 points)

Using the data of the diagram below and labour market correlations, decide whether the numbered statements listed are true or false.

The diagram below shows the labour market of a macro-economy. With the help of the diagram, you can identify data regarding real wages as well as related employment data. When solving the question, you will have to verify and qualify statements related to these data. We know that the real wage values indicated on the diagram are expressed in HUF thousands and population data in millions of people. (Completing the diagram is not required, but could help finding the answers needed.)

Using the data contained in the diagram, decide whether the statements below are true or false. Write the correct answer into the table below.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statements</th>
<th>True-False</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td><em>Labour supply would reach maximum value with real wages of HUF 300 thousand.</em></td>
<td>False</td>
</tr>
<tr>
<td>4.1.</td>
<td>With real wages of HUF 200 thousand, labour demand is 15 million people.</td>
<td></td>
</tr>
<tr>
<td>4.2.</td>
<td>The wage minimum in the economy is HUF 50 thousand.</td>
<td></td>
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<tr>
<td>4.3.</td>
<td>There is unemployment if real wages are lower than HUF 300 thousand.</td>
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<tr>
<td>4.4.</td>
<td>If real wages were HUF 350 thousand, employment would develop according to labour demand.</td>
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<tr>
<td>4.5.</td>
<td>The number of the active population is 40 million people.</td>
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<tr>
<td>4.6.</td>
<td>The maximum value of employment can be determined at 20 million people.</td>
<td></td>
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</tbody>
</table>
5. Pairing Up (6 points)

The statements below can be classified into more than one groups, therefore we have provided three different options. Pair up the groups with the statements and complete the table.

Below are details of the financial plan of a fictitious company. Using the information provided, analyse the enterprise’s costs according to whether a given cost involves monetary movements, then classify the various financial items into one of the groups listed below. A group may feature more than one statement, therefore more than one numbers can be written in a given column and there may also be empty columns.

After you have completed the table, you will have to give an explanation for a selected case.

Financial plan data
Example:
0) Financial expenses of operation (public utilities, office supplies, fuel, etc.) are determined by the plan aggregately for a calendar year.

1) The company would spend HUF 5 000 000 of its own funds to cover the costs of company establishment and incorporation and to purchase the technical equipment required to provide the service.

2) In order to provide the service, the company must rent a shop space, and will pay its rent every month.

3) The company has to hire an office manager secretary, whose negotiated wage will be paid on a monthly basis.

4) The service will be provided by the company in a subscription system, where subscribers pay a monthly fee of HUF 4 000.

5) The wear and tear period of the machines has been determined at three years, and annual amortisation is a proportionate amount.

6) The market interest rate is 8 per cent, and the capital invested would bear this much interest.

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit cost</td>
<td>Implicit cost</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Statements</td>
<td>0)</td>
<td></td>
<td></td>
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</tbody>
</table>

Explain your answer for Question 6).
III. Calculation and Plotting Questions

Follow the instructions indicated for each question carefully: complete the necessary calculations and/or prepare the diagrams according to the given specifications. Mark your answers with the number of the corresponding sub-question. In order to get maximum points, you have to answer all sub-sections correctly.

Question 6 (9 points)

A retailer sells two types of fruit juice: orange and pear drinks. He currently sells 6,000 cartons of orange juice and 6,500 cartons of pear juice every week. In order to increase turnover, the retailer has announced a price promotion for orange juice and dropped its price from HUF 240 to HUF 200, while the price of pear juice remained HUF 280. As a result of the price change, the quantity of orange juice sold per week increased to 7,800 cartons, while the quantity of pear juice sold dropped to 6,100 cartons.

6.1. Calculate the price elasticity indicator of orange juice and evaluate the result.

6.2. Calculate the cross-price elasticity of demand of pear juice and evaluate the result.

6.3. The retailer spent HUF 32,000 on advertising in the interest of a successful campaign. Can the price promotion be considered a success for the store, if we count lost revenues as costs? Calculate the change of the retailer’s profit and evaluate the success of the campaign.
Continuation of the solution for Question 6
Question 7 (11 points)

The table below contains a few of the production and cost-related data of a profit maximising company.

<table>
<thead>
<tr>
<th>Q</th>
<th>FC</th>
<th>VC</th>
<th>TC</th>
<th>MC</th>
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</table>

7.1. Fill in the data missing from the table.

7.2. Let’s assume that this company sells its products on a perfectly competitive market, where the current market price of the product is **HUF 1000/piece**. Using the data of the table, determine how much the company is offering for sale on the market if it maximises its profit. Explain your answer.

7.3. Using the production calculated above as basis, calculate the company’s profit.

7.4. Let’s assume that due to the drop in market price and demand, the company can only sell at a price of HUF 760. Could this **HUF 760** be a price at which the plant must be closed down? Either yes or no, you will have to support your answer with calculations.
Question 8 (4 x 2 = 8 points)

The following data is known of a three-player macro-economy:
Wages paid to households is 9 800, the value of investments is 3 000, the value of household savings is 2 400, company savings are 2 000, transfers paid to households are 1 300, there are no company transfers, government purchases are 4 000, and the tax paid by households is 3 200.

Based on the data given, calculate

8.1. the value of state savings,
8.2. the size of corporate tax,
8.3. the size of consumption,
8.4. and the gross income of the economy.
Question 9 (12 points)

The following data is available on an economy’s money market:

- equation of the money demand function: \( M_D = 590 + 0.55 \cdot Y - 80 \cdot i \),
- nominal money supply: \( M_S = 16000 \),
- price level is \( P = 5 \) and shall be considered unchanged,
- interest rate is 10% (In the functions, apply the percentage value of the interest rate, therefore in this case \( i = 10 \))

9.1. Characterise the current situation of the money market, and calculate excess demand or excess supply if income is \( Y = 7000 \).

9.2. Calculate what income would ensure money market equilibrium if the interest rate does not change.

9.3. Let’s assume that the central takes monetary measures in the interest of restoring money market equilibrium, and as a result nominal money supply changes to 16800. This change affects interest rate and the situation of the commodity market as well. As a result of economic interactions and further central bank activities, new equilibrium situations come about on both markets.

Calculate new equilibrium income and interest rate if the factors of commodity market demand are determined by the following functions:

- consumption function: \( C(Y) = 80 + 0.8Y \),
- investment demand function: \( I(i) = 1480 - 40 \cdot i \)!
Continuation of the solution for Question 9
<table>
<thead>
<tr>
<th>Topics</th>
<th>Serial number of question</th>
<th>Maximum score</th>
<th>Achieved score</th>
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<tbody>
<tr>
<td>Test questions</td>
<td>Multiple choice questions 1–10.</td>
<td>20</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written (elaborative)</td>
<td>1. True-false statements</td>
<td>12</td>
<td>12</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2. Definitions</td>
<td>8</td>
<td>8</td>
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<td>3. Elaborative question</td>
<td>8</td>
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<td>4. Complete the missing data</td>
<td>6</td>
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<td>5. Pairing Up</td>
<td>6</td>
<td>6</td>
<td></td>
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</tr>
<tr>
<td>Calculation and plotting</td>
<td>Question 6</td>
<td>9</td>
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<td></td>
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</tr>
<tr>
<td>questions</td>
<td>Question 7</td>
<td>11</td>
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<td>Question 8</td>
<td>8</td>
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<td>Question 9</td>
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Correcting teacher

Date: _______________________

__________________________

javító tanár /Correcting teacher

__________________________

jegyző /Notary

Dátum /Date: ................................. Dátum /Date : .................................