KÖZGAZDASÁGI ALAPISMERETEK (ELMÉLETI GAZDASÁGTAN) ANGOL NYELVEN

KÖZÉPSZINTŰ ÍRÁSBELI VIZSGA

2010. május 14. 8:00

Az írásbeli vizsga időtartama: 180 perc

ÉRETTSÉGI VIZSGA • 2010. május 14.

OKTATÁSI ÉS KULTURÁLIS MINISZTÉRIUM

Pótlapok száma

| Tisztázati |   |
| Piszkozati |   |

Közgazdasági alapismeretek (elméleti gazdaságtan) angol nyelven középszint — írásbeli vizsga 0921
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 up diagrams, the final solution, however; has to be finalized with 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

We have provided four possible answers that correctly complete the statements in the questions, but only one of the 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 slot corresponding to the given question number.**

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

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</tr>
</thead>
<tbody>
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<td>3.</td>
<td>4.</td>
<td>5.</td>
<td>6.</td>
<td>7.</td>
<td>8.</td>
<td>9.</td>
<td>10.</td>
</tr>
</tbody>
</table>

1. Over the course of economic production activity, we have to make decisions regarding
   a) which free good we should produce more from.
   b) what to produce and how to produce.
   c) how to decrease the amount of satisfied needs.
   d) how to increase the amount of resources unused in production.

2. The buying intention of consumers is influenced by
   a) the change in consumer income.
   b) a successful new advertisement.
   c) both of the above.
   d) none of the above.

3. Suppose that the index number of income elasticity in the case of good A has a negative sign. As a result, which of the following statements becomes true for good A?
   a) The total utility function of good A is a decreasing function.
   b) The quantity of good A cannot be scarce.
   c) The consumption of good A will surely decrease in the future.
   d) Good A is an inferior good.

4. Which of the following formulas correctly describes the method to calculate marginal cost?
   a) AC = MC
   b) MC = VC-FC
   c) MC = ΔVC/ΔQ
   d) MC = AVC

5. Choose the production factor the supply function of which is backward-bending.
   a) The aggregate market labour supply of a profession.
   b) Individual labour supply.
   c) The supply of leased agricultural land.
   d) The supply of money capital.

6. If there is deficit in the budget
   a) state expenditures exceed revenues.
   b) state expenditures exceed transfer incomes.
   c) primary incomes are less than derived incomes.
   d) none of the above.

Total: 20 points
7. The difference of GNI and NNI is
   a) intermediate consumption.
   b) state commodity purchases.
   c) incoming transfer from abroad.
   d) depreciation.

8. If the price level drops by 50%, while nominal wage doubles, then real wage
   a) decreases by 50%.
   b) doubles.
   c) remains the same.
   d) quadruples.

9. We are talking about inflation when
   a) the price of a product seasonally fluctuates.
   b) the price level remains unchanged, while nominal GDP increases.
   c) the price level increases in the long-term.
   d) in all of the above cases.

10. ....................... could be a source of comparative advantage.
    a) Increased productivity
    b) A more favourable natural characteristic
    c) Lower wage level
    d) All of the above
II. Written (elaborative) questions

1. True-false questions

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 will not be accepted. ATTENTION! ALL ANSWERS HAVE TO BE EXPLAINED! Each correct explanation is worth 1 point.

1.) If an economy produces on the production possibility frontier, there is no opportunity cost and no scarcity.

2 points

2.) At the saturation point of production, total utility is equal to 0.

2 points

3.) If net present value is negative, then the investment is not worth making.

2 points

4.) Suppose there is equilibrium on the commodity market in a two-player economy. In this situation, the sum of investments and savings is equal to the income.

2 points

5.) Unemployment can be decreased through state measures aimed at increasing the aggregate demand of the commodity market.

2 points

6.) Domestic market price decreases as the result of duties.

2 points
2. Definitions

Define the following concepts and economic phenomena briefly.

A) Demand

B) Indifference curve

C) Marginal propensity to import

D) Currency market

Total: 8 points

2 points

2 points

2 points

2 points
3. Elaborative question

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.

Define the essence of credit money and briefly present the characteristics of current money. Demonstrate the relationship between the purchasing power of current money and the change of price level.
4. Complete the missing data

To solve the following question, you will need to use correlations existing between certain categories of cost and profit. Complete the tables below with the correct category of cost, in such a way that the correlation determined by the rectangles becomes true for these categories.

The following diagrams illustrate the correlations existing between the various categories of cost accounting. Each diagram illustrates another correlation. The sizes of the joined rectangles illustrate the quantity ratios existing between the categories, therefore the diagrams also reveal the methods of calculating the concept missing from the table. 

For example:

<table>
<thead>
<tr>
<th>REVENUE</th>
<th>4.0.</th>
<th>Economic profit</th>
</tr>
</thead>
</table>

E.g. 4.0 = revenue minus economic profit, therefore: 4.0 = economic cost

Fill out the numbered fields by naming the concept that should logically be entered into that field. (You may also write your solution outside the table indicating the corresponding number.)

4.1.

<table>
<thead>
<tr>
<th>Explicit cost</th>
<th>Implicit cost</th>
</tr>
</thead>
</table>

4.2. 4.3.

<table>
<thead>
<tr>
<th>Accounting cost</th>
</tr>
</thead>
</table>

4.4. 4.5.

<table>
<thead>
<tr>
<th>Accounting profit</th>
</tr>
</thead>
</table>
5. Analysis, evaluation question

Certain sections of the excerpt titled “Shortage of Resources” will help you answer the questions listed below. Read the excerpt and answer the questions. Provide a written answer on the dotted lines or complete the diagram according to the instructions of the corresponding question.

Shortage of Resources
…According to estimates 1-1.5 billion people today do not have access to clean drinking and bathing water, and the situation could dramatically deteriorate over the coming decades. No more than 1% of the Earth’s water supply is suitable for human consumption…
…Water is indispensable and essential in all areas of life, yet our approach to it is often wasteful …
…Today the United States uses the most water in the world: close to 600 litres per day per person, while this same value is 200 litres in the European Union, 140 litres in Hungary and only 30 litres in African countries. Clean water is a necessity of life; an adult should drink at least 1.8 litres per day, while polluted water spreads infectious diseases …
(Hvg, 25 August 2001)

Questions
5.1. Is it true that drinking water is a free good? Please briefly explain your answer.

5.2. What market situation could water shortage be modelled as?
The diagrams below are missing some data, showing only the demand function and market equilibrium price. Complete both diagrams with a supply function, and select a \( P_1 \) price of your choice, with which there will be shortage on the market. On the Q axis, mark the section which corresponds to the size of the shortage at a \( P_1 \) price.

5.3. Give at least one specific example of how our water consumption is wasteful and uneconomical, or how water consumption could be reduced in the household.
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, and mark your answers with the number of the sub-question in the exercise. To get full points, please answer all sub-questions in detail.

Question 6

A consumer is prepared to spend **HUF 10 000** on goods x and y. The price of **good x** is **HUF 250**, and **good y** costs **HUF 200**.

6.1. Write down the equation of the budget line, and place it in the coordinate-system below. Mark the equation of this line with I₀.

6.2. Suppose the price of **good y** increases to **HUF 300**. Calculate how much income the consumer needs at the minimum to be able to purchase an equal amount of **good y** as before. Indicate this income with I₂.

6.3. Write down the equation of the new budget line after the following changes occur: the price of **product y** increases to **HUF 300**, the consumer’s income drops by **HUF 1000** compared to the original level, and the price of **product x** drops to **HUF 225**. Solve the equation for y.

Illustrate the modified budget line in the original coordinate-system. Mark the equation of the new budget line with a discontinuous line and mark it I₁.

Total: 10 points
Continuation of the solution of Question 6
Question 7

The table below contains the data of certain points of the production function of a company.

<table>
<thead>
<tr>
<th>$L$ (1.)</th>
<th>$Q$ (2.)</th>
<th>$MP_L$ (3.)</th>
<th>$AP_L$ (4.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
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<td>2</td>
<td>4</td>
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<td>4</td>
<td></td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
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<td></td>
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<tr>
<td>20</td>
<td>1.5</td>
<td>2.35</td>
<td></td>
</tr>
</tbody>
</table>

7.1. Complete the table with the missing data.

7.2. Give the name and calculation formula of the data set in Column (3.).

7.3. Determine in which range of value $L$ will average product be at a maximum? Explain your answer.
Question 8

Nothing but the following data is available on the 2008 results of a macro-economy. The table below is missing certain data, and can be completed using the correlations of the SNA system.

<table>
<thead>
<tr>
<th>Name</th>
<th>Value (HUF billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestically generated total primary income</td>
<td></td>
</tr>
<tr>
<td>Total primary income generated by foreign citizens in the country</td>
<td>120 000</td>
</tr>
<tr>
<td>Primary income generated abroad by domestic citizens</td>
<td></td>
</tr>
<tr>
<td>Balance of primary income flow</td>
<td>−80 000</td>
</tr>
<tr>
<td>Transfers received from abroad</td>
<td>60 000</td>
</tr>
<tr>
<td>Transfers sent abroad</td>
<td>40 000</td>
</tr>
<tr>
<td>GNI</td>
<td>480 000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>13 000</td>
</tr>
</tbody>
</table>

Using existing correlations between the indicators, calculate the following values.

8.1. GDP
8.2. Total primary income generated by domestic citizens
8.3. NNI
8.4. GNDI
Question 9

The following table contains data on a macro-economy.

<table>
<thead>
<tr>
<th>$Y$</th>
<th>$C(Y)$</th>
<th>$S(Y)$</th>
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<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
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<tr>
<td>4 000</td>
<td>3 750</td>
<td></td>
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<td>7 000</td>
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<tr>
<td>11 000</td>
<td>950</td>
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</tbody>
</table>

9.1. Calculate the marginal propensity to consume and autonomous consumption.

9.2. Write down the equations for the consumption function and the savings function.

9.3. Calculate the missing data and complete the table.

9.4. Calculate equilibrium income in the two-player economy if the value of investments is 1500.

9.5. Calculate equilibrium income if marginal propensity to consume decreases to 0.8, and investments grow by 150 units.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Question number</th>
<th>Maximum points</th>
<th>Points Scored</th>
<th>Maximum points of topic</th>
<th>Points scored in topic</th>
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<tbody>
<tr>
<td>Test questions</td>
<td>Multiple choice questions 1-10.</td>
<td>20</td>
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<tr>
<td>Written (elaborative)</td>
<td>1. True/false questions</td>
<td>12</td>
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<td></td>
<td>2. Definitions</td>
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<td>3. Elaborative question</td>
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<td>4. Complete the missing data</td>
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<td>5. Analysis, evaluation question</td>
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<tr>
<td>Calculation and plotting</td>
<td>Question 6</td>
<td>10</td>
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<td>Question 7</td>
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<td>Question 8</td>
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<td>Question 9</td>
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<td><strong>Points scored in written examination</strong></td>
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Correcting teacher

Date: ..................................

Javító tanár / Correcting teacher

Jegyző / Notary

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