

**ÉRETTSÉGI VIZSGA • 2006. május 18.**

**KÖZGAZDASÁGI ALAPISMERETEK  
(ELMÉLETI GAZDASÁGTAN)  
ANGOL NYELVEN  
BASICS OF ECONOMICS  
(THEORETICAL ECONOMICS)**

**KÖZÉPSZINTŰ ÍRÁSBELI  
ÉRETTSÉGI VIZSGA  
STANDARD LEVEL  
WRITTEN BACCALAUREATE  
EXAMINATION**

**JAVÍTÁSI-ÉRTÉKELÉSI  
ÚTMUTATÓ  
CORRECTION-EVALUATION  
GUIDE**

**OKTATÁSI MINISZTERIUM  
MINISTRY OF EDUCATION**

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## CORRECTION GUIDE

**During correction, using ink that is clearly distinguishable from the student's ink, all partial points, correct solutions and mistakes have to be indicated. The total points for a question have to be written in the pre-printed field. These points then have to be entered into the summary table at the end of the test sheet and the total points need to be summarized.**

**Several different answers are possible for the questions; this is why solutions can be different from those in the correction guide. If the solution is based on professionally correct elements, if the procedure is sufficiently detailed and leads to the correct solution then maximum points should be given.**

**When awarding points the following principles have to be followed:**

**1. Maximum points can only be given for perfect solutions.**

**In case of missing answers the partial point awardable for the answer will be deducted.**

**2. If a question has been solved using a logically sound procedure, but calculation errors have occurred then half of the awardable partial points have to be deducted, where the error was made. The logically sound procedure will still count as correct in the later stages of the solution regardless of the calculation error; therefore later partial points do not need to be deducted because of one error. (The total score of the question has to be a whole number regardless of the halving of the points.)**

**3. In case of logical errors no points are awarded, where the error was made, but further correct steps deserve the half point. (The total score of the question has to be a whole number regardless of the halving of the points.)**

**4. Only one answer per question is accepted.**

**5. At the true/false questions the indication of the letter and the explanation will be marked separately. The indication of T or F is worth 1 point separately. The correct explanation is also worth 1 point regardless of the indicated letter.**

**6. The partial points of section 3 cannot be further divided; deviation from this is possible only in case of the previously mentioned calculation errors.**

**7. Only whole numbers can be written in the pre-printed fields so that the total score of the test sheet will also be a whole number.**

### I. Multiple choice questions

1	2	3	4	5	6	7	8	9	10
d	b	C	A	C	C	D	A	C	C

Each correct answer is worth 2 points, max: 10x2 = 20 points.

### II. Written questions

#### Question 1: True-False statements (6x2 = 12 points)

T-F	Answer	Score
F	1) Capital provides interest income to the capital holder. Or: profit is the entrepreneur's income.	1+1 points
F	2) The difference between the sales revenue and the accounting profit is equal to the accounting profit. The condition of making economic profit is that accounting profit has to be greater than normal profit.	1+1 points
F	3) The supply function of land is a vertical line because for the economy arable land is a given size.	1+1 points
F	4) In this case employment is determined by the labour demand side, therefore, if real wages increase labour demand decreases, thus employment also decreases.	1+1 points
F	5) The value of the marginal propensity to consume is always less than 1. If the consumption function progresses above the 45° line then consumption is greater than income.	1+1 points
T	6) According to Okun's law, for a 1% decrease in the rate of unemployment, a 2.2% increase in income is necessary.	1+1 points

#### Question 2: Definitions (4x2 = 8 points)

Number	Definition	Score
A)	The difference between sales revenue and economic profit.	2 points
B)	The need satisfying level, which is ensured by the consumption of goods.	2 points
C)	The weighted average of the prices of various products.	2 points
D)	Central bank interventions ensure the maintenance of the exchange rate; at the most, the currency rate can only fluctuate in a pre-determined range.	2 points

**Question 3: Essay question (8 points)**

Viewpoint	Answer	Score
Procedure	General rule: Profits and costs have to be compared, and if profits exceed costs, then it is profitable to invest.	<b>2 points</b>
Comparison	<b>Current value:</b> the discounted sum of expected profits. $NPV = PV - \text{purchase price}$ <b>Internal rate of return</b> is the average rate of profitability of the investment, the interest rate ( $r$ ) which allows for a current net value of 0.	<b>3 points</b>
Evaluation	If the $NPV > 0$ , economic profit is attainable. If the $NPV = 0$ , normal profit is attainable If the $NPV < 0$ , the investment is loss-making. Or: $r > i$ , then economic profit $r = i$ , then normal profit $r < i$ loss	<b>3 points</b>

**Question 4: Pairing, concept-definition (5 points)**

Letter of definition	Answer	Score
A	<b>8</b>	<b>1 point</b>
B	<b>4</b>	
C	<b>1</b>	<b>1 point</b>
D	<b>3</b>	<b>1 point</b>
E	<b>2</b>	<b>1 point</b>
B	<b>The quotient of the price level and the amount of nominal money in circulation.</b>	<b>1 point</b>

**Question 5: Analysis, evaluation question (7 points)**

Number	Answer	Score
5.1.	Increases	<b>2 points</b>
5.2.	B, D	<b>2 points</b>
5.3.	Continues producing, because it exits the market at the business interruption point.	<b>1 point</b> <b>2 points</b>

### III. Calculation and plotting questions

#### Question 6 (2+2+2+2 = 8 points)

Number	Answer	Score
6.1.	According to $D = S$ , $Q_1 = 16$ Ft and $P_2 = 800$ HUF/kg	2 points
6.2.	The new price: $P_2 = 800 \cdot 1,25 = 1000$ Ft/kg The new price has to be substituted into the demand function: $1000 = 1600 - 50Q$ , thus $Q_2 = 12$ kg	1 point 1 point
6.3.	$TR_1 = 800 \cdot 16 = 12800$ $TR_2 = 1000 \cdot 12 = 12000$ $TR_2/TR_1 = 93,75\%$ , it has therefore <b>decreased by 6,25%</b>	2 points
6.4.	$D_2 = 12$ $S_2 = 1160/60 = 19,33$ <b>The stock: <math>S_2 - D_2 = 7,33</math> kg</b>	2 points

#### Question 7 (5+1+2+2+2 = 12 points)

##### 7.1. For filling out the table 1 point for each column = 5 points

Q	TC	FC	VC	AC	AVC	MC
0	1000	<b>1000</b>	<b>0</b>	-	-	-
10	1600	<b>1000</b>	<b>600</b>	<b>160</b>	<b>60</b>	<b>60</b>
20	2100	<b>1000</b>	<b>1100</b>	<b>105</b>	<b>55</b>	<b>50</b>
30	2400	<b>1000</b>	<b>1400</b>	<b>80</b>	<b>46,6</b>	<b>30</b>
40	2800	<b>1000</b>	<b>1800</b>	<b>70</b>	<b>45</b>	<b>40</b>
50	3400	<b>1000</b>	<b>2400</b>	<b>68</b>	<b>48</b>	<b>60</b>
60	4200	<b>1000</b>	<b>3200</b>	<b>70</b>	<b>53,6</b>	<b>80</b>
70	5600	<b>1000</b>	<b>4600</b>	<b>80</b>	<b>65,7</b>	<b>140</b>

Number	Answer	Score
7.2.	Average variable cost, $AVC = VC/Q$	1 point
7.3.	The value of Q which makes the equation $P = MR = MC$ true needs to be in the table thus, if $MC = 80$ , then is $Q = 60$ .	2 points
7.4.	$TR = 60 \cdot 80 = 4800$ <b><math>T\pi = 4800 - 4200 = 600</math></b>	2 points
7.5.	The company could uphold loss-making production, if $AVC_{min} < P < AC_{min}$ , thus according to the values in the table <b><math>P &gt; 45</math> and <math>P &lt; 68</math></b> .	2 points

**Question 8 (10+2= 12 points)**

Number	Answer	Score																																			
<b>8.1.</b>	<p><i>Calculations in the first three columns can be executed by using the formulas. To determine the number of employed the principle of the shorter side needs to be used, while output can be calculated with the help of the number of employed. Results:</i></p> <table border="1"> <thead> <tr> <th>Price level (P)</th> <th>Real wages (W/P)</th> <th>Size of labour demand (<math>L^D</math>)</th> <th>Number of employed (<math>L_f</math>)</th> <th>Output (Y)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>6</td> <td>400</td> <td>400</td> <td>4800</td> </tr> <tr> <td>2</td> <td>3</td> <td>1600</td> <td>1000</td> <td>9600</td> </tr> <tr> <td>3</td> <td>2</td> <td>3600</td> <td>3600</td> <td>14400</td> </tr> <tr> <td>4</td> <td>1,5</td> <td>6400</td> <td>6400</td> <td>19200</td> </tr> <tr> <td>5</td> <td>1,2</td> <td>10000</td> <td>6400</td> <td>19200</td> </tr> <tr> <td>6</td> <td>1</td> <td>14400</td> <td>6400</td> <td>19200</td> </tr> </tbody> </table>	Price level (P)	Real wages (W/P)	Size of labour demand ( $L^D$ )	Number of employed ( $L_f$ )	Output (Y)	1	6	400	400	4800	2	3	1600	1000	9600	3	2	3600	3600	14400	4	1,5	6400	6400	19200	5	1,2	10000	6400	19200	6	1	14400	6400	19200	<b>10 points</b> (2 points per column)
	Price level (P)	Real wages (W/P)	Size of labour demand ( $L^D$ )	Number of employed ( $L_f$ )	Output (Y)																																
	1	6	400	400	4800																																
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	5	1,2	10000	6400	19200																																
6	1	14400	6400	19200																																	
<b>8.2.</b>	The number of the unemployed = $L^S - L^D = 6400 - 3600 = 2800$	<b>2 points</b>																																			

**Question 9 (2+3+3 = 8 points)**

Number	Answer	Score
<b>9.1.</b>	According to the $M^S/P = M^D$ correlation <b>Y = 4000</b>	<b>2 points</b>
<b>9.2.</b>	$Y_1 = 4000 + 360 = 4360$ and $M^D = 0,5 \cdot 4360 - 50 \cdot 10 = 1680$ Thus $M^S/P = 1680$ , therefore <b><math>M^S_1 = 8400</math>, or <math>\Delta M^S = 900</math></b>	<b>3 points</b>
<b>9.3.</b>	The new price level: $P_2 = 5 \cdot 1,2 = 6$ and $Y_2 = 4900$ Therefore, the condition of equilibrium is: $8400/6 = 0,5 \cdot 4900 - 50i$ , $\rightarrow i = 21\%$	<b>3 points</b>