

**ÉRETTSÉGI VIZSGA • 2016. május 18.**

**KERESKEDELMI  
ÉS MARKETING  
ALAPISMERETEK  
ANGOL NYELVEN**

**EMELT SZINTŰ ÍRÁSBELI  
ÉRETTSÉGI VIZSGA**

**JAVÍTÁSI-ÉRTÉKELÉSI  
ÚTMUTATÓ**

**EMBERI ERŐFORRÁSOK  
MINISZTERIUMA**

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## Important Information

During correction, all partial points awarded for partial solutions, as well as all errors and mistakes have to be indicated.

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

1. Maximum points can only be awarded for perfect solutions. In case of missing answers, the partial point awardable for the answer must be deducted.
2. In case of logical errors, all partial points must be deducted at the section where the error was made. In case of questions solved with calculation errors, half of the awardable partial points have to be deducted at the section where the error was made. At later stages of the question, if the examinee provides logically correct solutions the results of which are incorrect due a previous error, then these should be considered entirely correct, therefore no subsequent points should be deducted due to one error.
3. Only one answer per question is to be evaluated.
4. In the case of calculation questions, indicating results only will not be sufficient; all partial calculations must also be indicated.
5. For “true or false” questions, simply indicating whether a given statement is **True** or **False** can be awarded 1 point. Incorrect indications accompanied by professionally sound explanations may be awarded 2 points.

(Explanations that differ from those given in the correction-evaluation guide, but which are nonetheless correct can be awarded full points.)

6. There may be several correct solutions to the questions. Procedures (names) that differ from those given in the correction-evaluation guide may also be entirely correct and as such must be awarded full points.

**Answers provided in the correction-evaluation guide can only be awarded the points indicated.**

**The indicated points can only be broken down further if indicated.**

**Resulting points may only be whole numbers.**

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**TEST QUESTIONS**

**50 points**

**1. Multiple Choice**

**6 \* 1 point**

Indicate the correct answer by underlining. There is only one correct answer per question. If your solution is unclear, you will not get any points.

1.1. Which one is **not** a characteristic of the gross margin?

- a) **It is the difference of the net sales price and the net purchase price.**
- b) It is the difference of the net sales revenue and the cost value of the goods sold.
- c) It is the sum of the individual margins multiplied by the quantity sold.

1.2. Liquidation

- a) is started by the company and its purpose is the company's permanent dissolution.
- b) is started by the company and its purpose is to save the company.
- c) **may be started by the company and its creditors alike, their purpose being to dissolve the company without a successor.**

1.3. The start-up capital of a general partnership

- a) may not be smaller than the amount determined by the Companies Act.
- b) **is of an amount and composition that is determined by the founding members.**
- c) may only consist of contributions in kind.

1.4. In a commercial enterprise, expenses of financial transactions include the following:

- a) dividend received, exchange loss, interest paid.
- b) dividend paid, exchange loss, interest paid.
- c) **exchange loss, interest paid.**

1.5. If sales revenue increases by 5.6% and a given cost item increases by a smaller % then the cost is said to be

- a) linear.
- b) progressive variable cost.
- c) **degressive variable cost.**

1.6. Hungary has been a member state of the European Union since

- a) 1 January 2004.
- b) **1 May 2004.**
- c) 1 January 2005.

**2. True or false statements**

**6 \* 3 points**

Decide whether the statements below are True (T) or False (F). Indicate whether the statement is true or false by writing T for True and F for False after the statements. Justify and explain every decision. Correct statements are worth 1 point, correct explanations are worth 2 points.

- 2.1. The basis of calculating the annual depreciation of a fixed tangible asset is its gross value, which is the same as its gross purchase price. ....F.....  
**False. The gross value of a fixed tangible asset, which is used as the basis of the calculation of its annual rate of depreciation, is the purchase price of the asset without VAT plus the costs of putting the asset into operation (- residual value).**
- 2.2. Cessation of an employment relationship and termination of an employment relationship are terms of equal content. ....F.....  
**False. Under certain conditions cessation of an employment relationship is automatic (in case of the death of the employee, the dissolution of the employer without a successor, end of the fixed term of employment), whereas termination reflects the will of one or both parties (mutual agreement, giving notice, giving notice with immediate effect).**
- 2.3. Only people who do not have limited liability membership in another enterprise can become sole proprietors. ....F....  
**False. A sole proprietor assumes unlimited liability for his/her enterprise, therefore, he/she cannot assume unlimited liability for an another enterprise.**
- 2.4. The most important strategic decision making body of a public limited company is the board of directors. ....F.....  
**False. The most important decision-making body of a public limited company is the general assembly, also known as the shareholders' assembly.**

2.5. According to Act I of 2012 on the Labour Code, in a corporate collective agreement deviations from the provisions of the law are not only possible in cases where the deviation would benefit the employees, but also in cases where the deviation would be detrimental to them. ....T....

**True. Act I of 2012 on the Labour Code changed the previously applicable rule that deviations from the law were only possible in corporate collective agreements if they were beneficial for the employees.**

2.6. Apart from the National Tax and Customs Administration (NAV), municipal governments can also act as tax authorities. ....T....

**True. The municipal government is responsible for administering local taxes, that is why it can be considered a tax authority.**

**3. Terms**

**5 \* 2 points**

Define the following terms.

3.1. Employment contract:

**Is an agreement regulating the bilateral relationship between the employee and the employer.**

3.2. Place of business:

**Is the geographical location where the enterprise performs its actual activity.**

3.3. Fixed financial assets:

**All assets that are invested into another enterprise, transferred to another enterprise by the proprietor to generate earnings in the long term or to obtain an influencing, controlling interest in the organisation.**

3.4. Equity capital:

**Is the start-up capital (the sum of the equity contributions made) of a limited liability company.**

3.5. Loan:

**Temporary transfer of funds in exchange for interest.**

**4. Long answer question**

**12 points**

Structure your thoughts and knowledge clearly and try to give a comprehensive account on the given subject.

Describe the factors that may influence costs. List at least six factors. Briefly describe their effects.

**Factors that may influence costs:**

**1. Turnover volume:**

1 point

- **Changes in turnover result in costs that can vary in different ways (they can be linear, progressive, and degressive); with the exception of relatively fixed costs.**

1 point

**2. Turnover composition:**

1 point

- **The distribution of different products incurs different costs, therefore, an increase in the ratio of cost intensive goods would increase the total sum of costs even if turnover remains the same.**

1 point

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- 3. Size of inventory:** 1 point
- **Maintaining a large inventory increases the costs of inventory maintenance, whereas a small inventory reduces the same cost.** 1 point
- 4. Network characteristics:** 1 point
- **if the company has several outlets, then their size, geographic location, and outfitting influence overall costs.** 1 point
- 5. Organisation of work:** 1 point
- **Well-organised work influences costs through limiting head count numbers and effectively scheduling working time arrangements.** 1 point
- 6. Changes in the price of cost factors:** 1 point
- **Changes in the price of services used by the company (electricity, natural gas, water, sewerage services, communication, etc.) have a distinct effect on costs even if the volume of the services used remains the same.** 1 point

*(Other technically correct answers include the following:*

- *Inventory composition*
- *Opening hours, number of shifts*
- *Nature of the goods*
- *Changes in the volume of cost factors used*
- *Changes in technology*

*1 point for listing the factor and 1 point for describing its effect)*

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**5. Preparation and compilation of documents** **4 points**

Complete the missing data from the 2013 profit and loss statement of a retail enterprise.

Name	HUF thousand
Operating profit	250 400
Profit on financial transactions	<b>- 1 100</b>
<b><i>Profit on ordinary business activities</i></b>	249 300
Extraordinary profit	900
Profit before taxes	<b>250 200</b>
Profit after taxes	226 080
<b><i>Balance sheet profit</i></b>	185 000

Calculation:

**Profit on financial transactions = 249 300 – 250 400 = HUF – 1 100 thousand**

1 point

**Profit before taxes = 249 300 + 900 = HUF 250 200 thousand**

1 point

**Correct completion of the missing names 2 \* 1 points**

2 points

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**ARITHMETIC AND GEOMETRY QUESTIONS IN THE TOPICS OF BUSINESS  
MANAGEMENT AND ECONOMICS**
**50 points****BUSINESS MANAGEMENT****25 points****1. Statement of assets and liabilities****17 points**

You would like to compile the simplified statement of assets and liabilities for 2013 of a food product retail company founded in 2010, and the following data are available to you:

Balance sheet as at 31 December 2013

Data in HUF thousand

<b>Assets</b>	<b>2013</b>	<b>Liabilities</b>	<b>2013</b>
<b>Fixed assets</b>	15 700	<b>Shareholders' equity</b>	<b>25 600</b>
Intangible assets	280	Registered capital	8 000
Tangible assets	12 020	Capital reserve	<b>1 000</b>
Fixed financial assets	<b>3 400</b>	Accumulated profit reserve	<b>10 200</b>
<b>Current assets</b>	<b>16 700</b>	Balance sheet profit	<b>6 400</b>
Stocks	<b>11 290</b>	<b>Provisions</b>	500
Receivables	1 760	<b>Liabilities</b>	6 300
Securities	750	Long-term	4 200
Financial assets	2 900	Short-term	<b>2 100</b>
<b>Total assets</b>	<b>32 400</b>	<b>Total liabilities</b>	<b>32 400</b>

Supplementary information for the preparation of the balance sheet:

- In 2013, balance sheet profit accumulated during the previous years came to HUF 10 200 thousand.
- The company's profit before taxes in the current year came to HUF 6900 thousand.  
Balance of items that modify the tax base = HUF – 2 700 thousand.
- The corporate tax rate is 10%, tax credit = HUF 550 thousand.
- The owners of the kft. receive a dividend of HUF 500 thousand from the after tax profit generated by the company.

Questions:

- 1.1. Calculate the missing data and put them on the correct balance sheet line. 13 points

Calculation:

**Current assets = 32 400 – 15 700 = HUF 16 700 thousand 1 point**

**Stocks = 16 700 – (1 760 + 750 + 2 900) = HUF 11 290 thousand 1 point**

**Fixed financial assets = 15 700 – (280 + 12 020) = HUF 3 400 thousand 1 point**

**Total assets = Total liabilities = HUF 32 400 thousand 1 point**

**Short-term liabilities = 6 300 – 4 200 = HUF 2 100 thousand 1 point**

**Shareholders' equity = 32 400 – (500 + 6 300) = HUF 25 600 thousand 1 point**

**Accumulated profit reserve = HUF 10 200 thousand 1 point**

**Balance sheet profit:**

**Corporate tax base = 6 900 – 2 700 = HUF 4 200 thousand 1 point**

**Taxes = 4 200 \* 0.1 = HUF 420 thousand 1 point**

**Taxes payable = 420 – 550 = HUF – 130 thousand, therefore, no taxes have to be paid. 1 point**

**Profit after taxes = HUF 6 900 thousand 1 point**

**Balance sheet profit = 6 900 – 500 = HUF 6 400 thousand 1 point**

**Capital reserve = 25 600 – (8 000 + 10 200 + 6 400) = HUF 1 000 thousand 1 point**

- 1.2. Calculate the quick ratio (the ratio of financial assets to short-term liabilities) and give an opinion on how the solvency of the company has changed if the company's quick ratio was 83% in the preceding year. (*Rounding precision: % to one decimal place.*)

4 points

Calculation:

**quick ratio = 2 900 / 2 100 = 1.3809 = 138.1% 1 point**

Assessment and explanation:

**The company's solvency has improved. 1 point**

**In 2013, the sum of the company's financial assets exceeded the sum of its short-term liabilities, the ratio of the company's financial assets to its short-term liabilities came to 138.1%. In 2012, the sum of the company's financial assets only covered 83% of the company's short-term liabilities. 2 points**

**2. Payroll management 8 points**

The following payroll data of a national retail company are available for 2013:

- Average salary HUF 165 thousand/person/month
- labour cost percentage: 5.7%.
- turnover: HUF 1650 million

The company plans to increase productivity by 6.5% and to raise the average salary by 4.5%.

Question:

- 2.1. Calculate the per capita turnover for 2013. (*Rounding precision: HUF thousand; one decimal place for other indicators.*)

Calculation:

**Productivity = Average salary / labour cost percentage = (165\*12) / 0.057 = HUF 34 737 thousand/person/year** 2 points

**Or: Salary amount = E \* labour cost percentage = 1 650 000 \* 0.057 = HUF 94 050 thousand**

**H= Salary amount / 12 / Average salary = 94 050 / 12 / 165 = 47.5 persons**

**P= E / H= 1 650 000 / 47.5 = HUF 34 737 thousand/person/year**

- 2.2. Calculate the monthly productivity, average salary and labour cost percentage indicators planned for 2014 and briefly explain the planned changes. (*Rounding precision: HUF thousand; two decimal places for % indicators.*)

Calculation:

**Productivity = 2 895 \* 1.065 = 3 083.1 = HUF 3 083 thousand/person/month**

1 point

**Average salary = 165 \* 1.045 = 172.4 = HUF 172.0 thousand/person/month**

1 point

**Labour cost percentage = 172 / 3 083 = 0.05578 = 5.58%**

2 points

Assessment:

**According to the plans, payroll management will improve in 2014.**

1 point

**Productivity will increase at a higher rate than the average salary, therefore, the labour cost percentage indicator (amount of salary necessary to generate a unit of turnover) will decrease.**

1 point

**ECONOMICS**

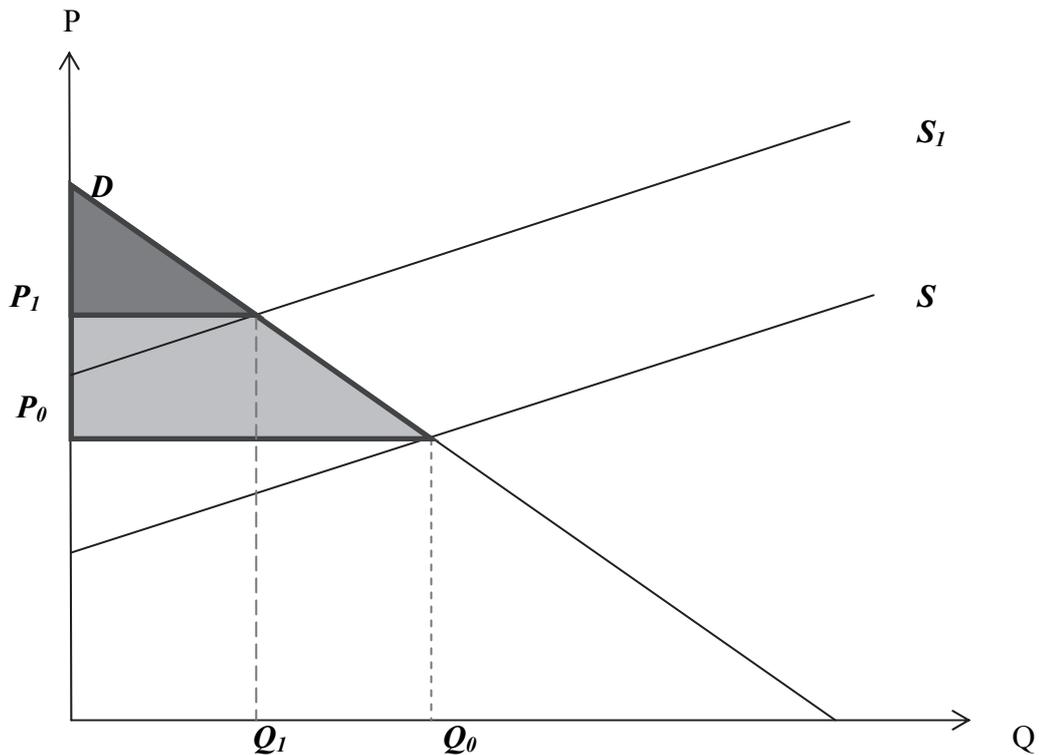
**25 points**

**3. Market equilibrium**

**10 points**

Let's assume that the flower market and the gardening employees' market are both perfectly competing markets.

The diagram below shows the supply and demand functions of the flower market.



Question:

- 3.1. Mark the functions in the diagram as usual.
- 3.2. Mark the equilibrium price ( $P_0$ ) and the equilibrium quantity ( $Q_0$ ).
- 3.3. Let's assume that the salaries of gardeners are rising. Draw and mark how market situation has changed and mark the new equilibrium price ( $P_1$ ) and equilibrium quantity ( $Q_1$ ).
- 3.4. Clearly indicate the consumer surplus in both cases, for example by colouring it in differently or by indicating the peaks of the area with the corresponding letters; explain what consumer surplus means.
- 3.5. Briefly assess the changes, including the consumer surplus.

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**Score:**

- 3.1. 1 point each for marking the original functions. 2 points**
- 3.2. Marking the old equilibrium price and quantity. 1 point**
- 3.3. Drawing and marking the new supply function. 1 point**  
**Marking the new equilibrium price and quantity. 1 point**
- 3.4. Marking the old consumer surplus. 1 point**  
**Marking the new consumer surplus. 1 point**  
**A consumer surplus is obtained by buyers, who, based on their own sense of gain, are willing to pay more than the market price of a given product (or: consumer surplus is monetary gain, which the consumer acquires through buying the product). 1 point**
- 3.5. Increasing salaries increases the cost of production, which shifts the supply function to the left, meaning that the quantity offered for the same price will be lower. 1 point**  
**As a result, the market equilibrium will be achieved at higher prices and lower quantities, which will, in turn, reduce the consumer surplus. 1 point**

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**4. Arithmetic questions** **15 points**

4.1 Monopoly market 8 points

Data describing a profit maximising company in a position of monopoly (unit of Q is one ton, P equals the price of one ton of product in EUR thousand):

- Demand function of the product produced by the company:  
 $Q_D = 20 - 0.5P$
- Total Cost function (in thousand EUR)  $TC = 20Q^2 - 4$
- Marginal revenue function:  $MR = 40 - 4Q$
- Marginal cost function:  $MC = 40Q$

Calculate:

- a) the quantity produced by the monopoly (accuracy: kg),
- b) the market price of the product (accuracy: one decimal place) and
- c) size of the profit (accuracy: one decimal place).

Provide a brief, one-sentence explanation of your results.

Solution:

**a) optimal quantity produced, if:  $MR = MC$**

$$40 - 4Q = 40Q$$

$$40 = 44Q$$

$$Q = 0.9090$$

**1 point**

**Optimal quantity produced: 0.909 tons or 909 kg.**

**1 point**

**b)  $Q_D = 20 - 0.5P$**

$$0.909 = 20 - 0.5P$$

$$0.5P = 19.091$$

$$P = 38.182$$

$$P = 38.2$$

**1 point**

**Price of one ton of product = EUR 38.2 thousand.**

**1 point**

**c)  $TR = 0.909 * 38.2 = 34.7$**

**1 point**

$$TC = 20 * 0.909^2 - 4 = 12.5$$

**1 point**

$$TP = 34.7 - 12.5 = 22.2$$

**1 point**

**The economic profit generated through the sales of the quantity produced comes to EUR 22.2 thousand.**

**1 point**

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**4.2 Macro income 4 points**

In a closed macro-economy household consumption comes to 7000, investments come to 2000, total private sector savings amount to 2200, wages equal 9000, value of government purchases amount to 1500, while transfer to households equals 800.

Calculate:

- a) the macro income of the economy and
- b) balance of the state budget.

Solution:

**a)  $Y = C + I + G$**

**$Y = 7\,000 + 2\,000 + 1\,500 = 10\,500$  2 points**

**b)  $I = S_H + S_C + S_S$**

**$S_S = 2\,000 - 2\,200 = -200$  2 points**

**4.3 Economic profit 3 points**

In the first year of its operation an enterprise has generated EUR 37 000 in accounting profit and EUR 32 000 in ordinary profit.

Question:

- a) Calculate the amount of its economic profit.
- b) Was starting the enterprise worthwhile? Give an explanation of no more than one sentence.

Solution:

**a) economic profit = 37 000 – 32 000 = EUR 5 000 1 point**

**b) Starting the company was worthwhile. 1 point**

**Explanation: The company's economic profit was positive. 1 point**