KÖZGAZDASÁG
ISMERETEK
ANGOL NYELVEN

KÖZÉPSZINTŰ
ÍRÁSBELI VIZSGA

JAVÍTÁSI-ÉRTÉKELÉSI
ÚTMUTATÓ

EMBERI ERŐFORRÁSOK MINISZTÉRIUMA
Guidelines for evaluating the performance of examinees
(for correcting teachers)

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

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

If the examinee marks all available answers for test questions, no points may be awarded. If you mark more answers than requested, the number of points awarded overall will be reduced by the number of surplus answers provided. (The total number of points awarded may not be negative.)

During their solution, the examinee may correct incorrect answers, however, only clearly and regularly marked corrections may be accepted.

In the case of logical or calculation errors, no points are awarded at the section where the error was made, but subsequent correct steps may be awarded the applicable points.
TEST QUESTIONS

Question 1 (8 points)

For Test Questions 1-8, we have provided four possible answers, but only one of these is correct. The other answers are either partially correct or completely wrong. Select the letter corresponding to the correct answer and write it into the table found below the statement.

Attention! Only one answer will be accepted for each question. Unclear markings cannot be awarded any points. In the case of corrections, only clear and unambiguous answers may be accepted.

1) Based on the law of demand, the higher the market price is in the market of a given product,
   a) the less quantity sellers want to sell of the product.
   b) the more quantity sellers want to sell of the product.
   c) the more quantity consumers want to purchase of the product.
   d) the less quantity consumers want to purchase of the product.

Letter of the correct answer: d

2) One of the tool-sets of the marketing communication mix (or promotional mix) is
   a) sales promotion.
   b) packaging.
   c) segmentation.
   d) positioning.

Letter of the correct answer: a

3) The income generated within the territory of a given country by a company with a registered seat abroad is recorded in which SNA indicator of said given country?
   a) GDP
   b) GNI
   c) GNDI
   d) NNI

Letter of the correct answer: a

4) Which sector is not part of the two-player macro-economy?
   a) Households.
   b) Companies.
   c) The state.
   d) All of the above.

Letter of the correct answer: c
5) Which of the following is not a marketing activity:
   a) market analysis.
   b) familiarising consumers with the product.
   c) influencing and manipulating buyers.
   d) determining the cost price of the product.

   Letter of the correct answer: d

6) All ......................... costs are also accounting costs, but not all accounting costs are ......................... costs.

   Which is the correct word to complete the statement?
   a) implicit
   b) explicit
   c) economic
   d) alternative

   Letter of the correct answer: b

7) Which cost function is not a U-shaped function?
   a) AFC
   b) AC
   c) MC
   d) AVC

   Letter of the correct answer: a

8) Which market form is typical of the market of mobile services in Hungary?
   a) Oligopoly.
   b) Monopoly.
   c) Perfect competition.
   d) Pure monopoly.

   Letter of the correct answer: a

(All correct answers are worth 1 point each, for a total of 8 points.)

Question 2  (5 points)

Pair up the corresponding contract-related definitions and terms. Write the letter of the corresponding concept under the correct number in the table. One term will not be needed. Only write one letter for each definition.

Unclear markings cannot be awarded any points. In the case of corrections, only clear and unambiguous answers may be accepted.
Definitions:
1. One of the forms of the invalidity of a contract, which means that any of the parties may claim the invalidity of the contract without restrictions in time, and that the court must *ex officio* take the invalidity of the transaction into consideration.

2. One of the reasons for the invalidity of a contract, where the contractual will is verifiably missing for at least one of the parties or if this is not recognised as contractual will by law.

3. One of the reasons for the invalidity of a contract, where the error is contained in the contract as a statement.

4. One of the contracting parties terminates the contract with prospective effect.

5. One of the contracting parties terminates the contract with retroactive effect to the time of the conclusion of the contract.

Terms:
A. Termination
B. Defect in consent
C. Error in contract statement
D. Nullity
E. Rescission
F. Cancellation

<table>
<thead>
<tr>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>B</td>
<td>C</td>
<td>A</td>
<td>E</td>
</tr>
</tbody>
</table>

*(All correct answers are worth 1 point each, for a total of 5 points.)*

*(If the examinee writes a letter into the table more than once, then all unnecessarily entered letters are minus 1 point, but the examinee's total score for the question may not be negative.)*

**Question 3** *(5 points)*

Determine what characterises the production of companies in a perfectly competitive market if the conditions below apply: Write the letter of the applicable condition into the second column of the table next to the characteristic. Write only one letter next to a given definition.

Unclear markings cannot be awarded any points. In the case of corrections, only clear and unambiguous answers may be accepted.

<table>
<thead>
<tr>
<th>Characteristic:</th>
<th>Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company produces by realising economic profit.</td>
<td>E</td>
</tr>
<tr>
<td>The company produces by realising zero economic profit.</td>
<td>B</td>
</tr>
<tr>
<td>The company produces but is loss-making.</td>
<td>C</td>
</tr>
<tr>
<td>The company is at the shutdown point.</td>
<td>D</td>
</tr>
<tr>
<td>The company is not producing.</td>
<td>A</td>
</tr>
</tbody>
</table>
The conditions:
A. \( P < AVC_{\text{min}} \)
B. \( P = AC_{\text{min}} \)
C. \( AVC_{\text{min}} < P < AC_{\text{min}} \)
D. \( P = AVC_{\text{min}} \)
E. \( P > AC_{\text{min}} \)

(All correct answers are worth 1 point each, for a total of 5 points.)
(If the examinee writes a letter into the table more than once, then all unnecessarily entered letters are minus 1 point, but the examinee's total score for the question may not be negative.)

Question 4 (8 points)
Make the following statements on the market of a product correct by placing the phrases INCREASES, DECREASES or REMAINS UNCHANGED in the various sentences. Write the solution corresponding to the given change on the dotted line. Apart from the changes, all other conditions are assumed unchanged.

a) If market price is higher than equilibrium price then if market mechanism is enforced, market price DECREASES.

b) If market price is lower than equilibrium price then if market mechanism is enforced, market price INCREASES.

c) If market price is equal to equilibrium price then if market mechanism is enforced, market price REMAINS UNCHANGED.

d) If there is excess demand in the market of a product, market price likely INCREASES.

(All correct answers are worth 2 points each, for a total of 8 points.)

Question 5 (4 points)
Decide which market form the statements listed below are typical of. Write the letter of the statement into the appropriate column of the table. You may only enter each letter into the table once.

Unclear markings cannot be awarded any points. In the case of corrections, only clear and unambiguous answers may be accepted.

Statements:
a) There are a few sellers in the market that are able to influence prices, and entry to the market is difficult.
b) There is only one seller in the market, and all demand is satisfied by this company.
c) The companies of the market are price accepters, and cannot influence prices.
d) Cannot have economic profit in the long run.
Question 6  (4 points)

The data of the opening and closing inventory of a company for a given period is as follows:

<table>
<thead>
<tr>
<th>Name of stock</th>
<th>Stock value 1 January (HUF)</th>
<th>Stock value 31 December (HUF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods for resale</td>
<td>2 000 000</td>
<td>2 500 000</td>
</tr>
<tr>
<td>Work-in-process</td>
<td>500 000</td>
<td>200 000</td>
</tr>
<tr>
<td>Auxiliary materials</td>
<td>850 000</td>
<td>500 000</td>
</tr>
<tr>
<td>Third-party packages</td>
<td>200 000</td>
<td>50 000</td>
</tr>
<tr>
<td>Finished goods</td>
<td>8 600 000</td>
<td>7 800 000</td>
</tr>
<tr>
<td>Raw materials</td>
<td>3 800 000</td>
<td>3 200 000</td>
</tr>
<tr>
<td>Semi-finished products</td>
<td>1 400 000</td>
<td>1 000 000</td>
</tr>
</tbody>
</table>

a) Write down the method of calculating the change in self-manufactured stocks by using the stock value data provided. You do not have to perform any calculations. (3 points)

Method of calculating the change in self-manufactured stocks:

\[
\begin{align*}
200 000 & - 500 000 + 7 800 000 - 8 600 000 + 1 000 000 - 1 400 000 \\
\text{(1 point)} & \quad \text{(1 point)} & \quad \text{(1 point)}
\end{align*}
\]

Or

\[
(200 000 + 7 800 000 + 1 000 000) - (500 000 + 8 600 000 + 1 400 000)
\]

b) Name the profit category impacted by the change in self-manufactured stocks. (1 point)

Name of profit category: operating (business) profit
Question 7 (6 points)

Name the payment methods whose description is shown in the second column of the table below. Write the name of the corresponding payment methods on the dotted lines in the first column of the table.

<table>
<thead>
<tr>
<th>Name of payment method</th>
<th>Description of payment method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash transfer order</td>
<td>István Kovács goes to the post office to pay cash to the payment account of the gas utility provider to settle the gas consumption invoiced to him by the gas utility provider.</td>
</tr>
<tr>
<td>Simple bank transfer</td>
<td>A company instructs its payment service provider to transfer the countervalue of the materials purchased by it to the payment account of the company selling the materials, to the debit of its payment account.</td>
</tr>
<tr>
<td>Bank card</td>
<td>A payment tool made of plastic, that can be used to settle the countervalue of various goods and services purchased using deposit money or credit.</td>
</tr>
<tr>
<td>Direct debit</td>
<td>By handing over batch orders, the town’s water utility provider instructs its payment service provider to debit the payment accounts of service users with the amount of the water bill every two months.</td>
</tr>
<tr>
<td>Debit based on an authorisation letter</td>
<td>The telephone operator company submits a collection order to the obligor's payment service provider as they have agreed that the phone bill will be settled by the obligor in this manner every month.</td>
</tr>
<tr>
<td>Batch transfer</td>
<td>By handing over batch orders, the employer instructs its payment service provider to transfer net wages every month to its employees with payment accounts.</td>
</tr>
</tbody>
</table>

(All correct answers are worth 1 point each, for a total of 6 points.)

QUESTIONS INVOLVING BUSINESS CALCULATIONS AND THE EDITING OF ACCOUNTING ITEMS

Question 1 (9 points)

The following data is available on our company’s tax payment liabilities:

1) Sales and purchasing data in the given month are as follows:

   Amount indicated on the invoice received for raw material purchase: HUF 3 000 000 + 27% VAT. The total of the cash invoice for the shipping fee for the raw material purchase was HUF 63 500, which is inclusive of 21.26% value-added tax. Amount indicated on the invoice received for the use of Internet services: HUF 20 000 + 18% VAT. The net sales revenue invoiced to the buyer on the finished goods sold is HUF 5 000 000 (VAT 27%). The amount of the sale of semi-finished goods invoiced to the buyer, with 27% VAT added, was HUF 1 524 000.

Prepare the company’s VAT return for the given month. Use the auxiliary data provided below. Underline the term that refers to the type of tax to be recognised.

(7 points)
### VAT RETURN
(Data in HUF thousand)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (HUF)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payable VAT</td>
<td>1 674</td>
<td>(1 point)</td>
</tr>
<tr>
<td>Pre-charged VAT</td>
<td>827</td>
<td>(1 point)</td>
</tr>
<tr>
<td>VAT to be recognised</td>
<td>847</td>
<td>(1 point)</td>
</tr>
</tbody>
</table>

**Auxiliary calculations:**

\[
3 000 000 \times 0.27 = 810 000
\]

\[
63 500 \times 1.27 = 50 000 \quad \text{VAT: } 50 000 \times 0.27 = 13\,500
\]

\[
\text{or } 63\,500 \times 0.2126 = 13\,500
\]

\[
20 000 \times 0.18 = 3600
\]

Total deductible VAT: \(810\,000 + 13\,500 + 3\,600 = 827\,100\)

\[
5 000 000 \times 0.27 = 1350\,000
\]

\[
1\,524\,000 \times 1.27 = 1\,200\,000 \quad \text{VAT: } 1\,200\,000 \times 0.27 = 324\,000
\]

\[
\text{or } 1\,524\,000 \times 0.2126 = 324\,000
\]

Total payable VAT: \(1\,350\,000 + 324\,000 = 1\,674\,000\)

VAT to be recognised: \(1\,674\,000 - 827\,100 = 846\,900\)

2) The company has a 56 m² store area, on which the government imposed building tax.

**Calculate the company’s local tax payment liability.**

(2 points)

**Supplementary information:**

The rate of building tax for residential buildings is 800 HUF/m², and 1 100 HUF/m² for non-residential buildings.

Local tax payment liability: \(\text{HUF } 61\,600\)

Auxiliary calculation: \(56 \times 1\,100 = 61\,600\)

**Question 2**

(15 points)

Tables 1 and 2 contain information on a company’s purchasing and sales data for 2017.

**Table 1**

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity purchased</th>
<th>Purchase unit price (HUF/kg)</th>
<th>Change in purchase unit prices (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>500</td>
<td>1 500</td>
<td>100.0</td>
</tr>
<tr>
<td>February</td>
<td>800</td>
<td>1 680</td>
<td>112.0</td>
</tr>
<tr>
<td>March</td>
<td>700</td>
<td>1 620</td>
<td>108.0</td>
</tr>
<tr>
<td>Total</td>
<td>2 000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2

Finished goods sales data for the first six months

<table>
<thead>
<tr>
<th>Name of product</th>
<th>Unit price (HUF/pc)</th>
<th>Quantity of products sold (pcs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st quarter</td>
<td>2nd quarter</td>
</tr>
<tr>
<td>A</td>
<td>12 000</td>
<td>12 500</td>
</tr>
<tr>
<td>B</td>
<td>6 000</td>
<td>6 200</td>
</tr>
</tbody>
</table>

When solving the question, calculate to four decimal places; and when calculating percentage values, calculate to one decimal place. Show auxiliary calculations.

a) Complete Table 1 by entering the missing data. Write the calculated values on the dotted lines in Table 1.

Auxiliary calculations:

500 / 0.25 = 2 000
2 000 x 0.4 = 800
100 % − 25% − 40% = 35%
2 000 x 0.35 = 700 or 2 000 − 500 − 800 = 700
1680 / 1 500 = 1.12 that is 112.0%
1 500 x 1.08 = 1 620

The correct calculation of the two missing data is worth 1 point in total.

b) Calculate the average purchase unit price of the raw material for the 1st quarter. Mark the measurement unit of the indicator calculated as well. Name the indicator calculated.

Average purchase unit price of raw material: **1614 HUF/kg**

(Correct marking of measurement unit is worth 1 point.)

Name of the statistical indicator: **weighted arithmetic mean**

Auxiliary calculations:

(500 x 1 500 + 800 x 1 680 + 700 x 1 620) / 2 000 = (750 000 + 1 344 000 + 1 134 000) / 2 000 = 3 228 000 / 2000 = 1 614

or 0.25 x 1 500 + 0.4 x 1 680 + 0.35 x 1 620 = 375 + 672 + 567 = 1 614

(1 point)

1 500 x 1.08 = 1 620

(The correct calculation of the two missing data is worth 1 point in total.)

(c) By using the data in Table 2, calculate how sales revenue changed in the period under review (from the 1st quarter to the 2nd quarter) at the whole of the company. Name the statistical indicator you calculated.

Change in sales revenue: **107.9%**

Name of the statistical indicator: **(aggregate) value index**

Auxiliary calculations:

Σq1p1 = 980 x 12 500 + 2 200 x 6 200 = 12 250 000 + 13 640 000 = 25 890 000

(1 point)

Σq0p0 = 1 000 x 12 000 + 2 000 x 6 000 = 12 000 000 + 12 000 000 = 24 000 000

(1 point)

Iv = Σq1p1 / Σq0p0 = 25 890 000 / 24 000 000 = **1.0788**

107.9%
d) By using the data in Table 2, calculate:

1) the aggregate, average change in sales volume in the period under review.

   Change in sales volume: 104.0%  (2 points)

   Auxiliary calculations:
   $\Sigma q_1p_0 = 980 \times 12000 + 2200 \times 6000 = 11760000 + 13200000 = 24960000$  (1 point)
   $I_q^0 = \frac{\Sigma q_1p_0}{\Sigma q_0p_0} = \frac{24960000}{24000000} = 1.0400$  104.0%

   (The point may also be awarded if the examinee calculates the current-weighted (Paasche) volume index.)

2) the aggregate and average change in sales prices at the company in the period under review.

   Change in sales prices: 103.7%  (1 point)

   Auxiliary calculations:
   $I_p^1 = \frac{\Sigma q_1p_1}{\Sigma q_1p_0} = \frac{25890000}{24960000} = 1.0373$  103.7%

   (The point may also be awarded if the examinee calculates the base-weighted (Laspeyres) price index.)

e) Quantify the correlation between the statistical indicators calculated in sections c) and d) of Question 2.

   Verification: $I_v = I_p^1 \times I_q^0 = 1.04 \times 1.0373 = 1.0788$  (1 point)

   (During the solution of questions, points may also be awarded if no statistical markings or formulas are provided, but the examinee has correctly indicated the process of calculations.)

Question 3  (13 points)

Balances of the key general ledger accounts of a company on 1 October 2017:

211. Raw materials  HUF 3 000 000
384. Deposit account for settling of accounts  HUF 18 200 000
381. Cash on hand  HUF 320 000

Supplementary information:

- the quantity of the raw material stock of the company as at 1 October 2017 is 3 000 kg,
- the company only uses one type of raw material to conduct its production activities,
- the company evaluates reductions in inventory using the FIFO process.

The economic events impacting the raw material stock in October 2017 were the following:

1. The company purchased 2000 kg of raw material for its production activities on 2 October, and the total of the invoice to be settled by bank transfer was HUF 2 794 000 (VAT 27%).
2. On 4 October, the company returned 10% of the raw material purchased on 2 October on account of quality problems. The corrective invoice arrived, VAT is 27%.

3. On 9 October, the company again purchased raw materials (1000 kg) at a price of HUF 1 200 000 + 27% VAT.

4. On 11 October, the company requested a 5% quality discount for the raw material purchased on 9 October, which discount was granted by the company selling the raw material. The corrective invoice arrived, VAT is 27%.

5. On 15 October, the company used 5 000 kg of raw material.

a) **Based on the information above, complete the data missing from the table. Enter the missing values into the table, on the dotted lines. Show the necessary auxiliary calculations.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Quantity (kg)</th>
<th>Unit price (HUF/kg)</th>
<th>Value (HUF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 October</td>
<td>Opening inventory</td>
<td>3 000</td>
<td>1 000</td>
<td>3 000 000</td>
</tr>
<tr>
<td>2 October</td>
<td>Purchasing</td>
<td>2 000</td>
<td>1 100</td>
<td>2 200 000</td>
</tr>
<tr>
<td>4 October</td>
<td>Return</td>
<td>200</td>
<td>1 100</td>
<td>220 000</td>
</tr>
<tr>
<td>9 October</td>
<td>Purchasing</td>
<td>1 000</td>
<td>1 200</td>
<td>1 200 000</td>
</tr>
<tr>
<td>11 October</td>
<td>Quality discount</td>
<td>-</td>
<td>5%</td>
<td>60 000</td>
</tr>
<tr>
<td>15 October</td>
<td>Use</td>
<td>5 000</td>
<td>-</td>
<td>5 208 000</td>
</tr>
</tbody>
</table>

**Auxiliary calculations:**

- 2 October: purchasing without VAT 2 794 000 Ft / 1.27 = 2 200 000
  unit price: HUF 2 200 000 / 2000 = 1 100
  *(The point may only be awarded if the examinee has entered the values calculated into the table as well.)*

- 4 October: returned quantity: 2 000 x 0.1 = 200
  unit price: 1 100
  value: 200 x 1 100 = 220 000 or 2 200 000 x 0.1 = 220 000
  *(In the case of the correct calculation of quantity, unit price and value and entering these data into the table: 1 point)*

- 11 October: net amount of discount: 1 200 000 x 0.05 = 60 000
  *(Calculation of value and entering into the table: 1 point)*

- 15 October:
  3 000 x 1 000 + (2 000 – 200) x 1 100 + 200 x (1 200 x 0.95) =
  *(1 point) (1 point) (1 point)*
  = 5 208 000
  *(1 point, if the examinee has entered the value into the table as well)*

b) **Book economic events no. 1, no. 2 and no. 5 specified in Question 3 chronologically. Make sure that you use the corresponding account numbers included the attached chart of accounts when marking the accounting entries.**
Mark the auxiliary calculations needed to book the economic events and which have not been indicated in section a) of Question 3.

Auxiliary calculations:

01.10: VAT = 2 200 000 x 0.27 = 594 000
04.10: VAT = 220 000 x 0.27 = 59 400

Mixed journal October 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Text</th>
<th>Accounts payable</th>
<th>Accounts receivable</th>
<th>Total amount payable = Total amount payable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>number</td>
<td>name</td>
<td>number</td>
</tr>
<tr>
<td>01.10</td>
<td>Raw material purchasing</td>
<td>211.</td>
<td>Raw materials</td>
<td>454.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01.10</td>
<td>Raw material VAT</td>
<td>466.</td>
<td>Pre-charged VAT</td>
<td>454.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04.10</td>
<td>Return of raw material</td>
<td>454.</td>
<td>Suppliers</td>
<td>211.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04.10</td>
<td>VAT of return of goods</td>
<td>454.</td>
<td>Suppliers</td>
<td>466.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.10</td>
<td>Material usage</td>
<td>51.</td>
<td>Material costs</td>
<td>211.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(All correct entry lines are worth 1 point each, for a total of 5 points.) (Other wording may also be accepted.) The point may only be awarded if the examinee has also given the names of the accounts.

The points may only be awarded for accounting entries related to value added tax if the correct auxiliary calculation is also shown.

For accounting entries where points are awarded for the provision of the amount to be booked using auxiliary calculations (in sections a) or b)) : if the examinee provided the amount to be booked incorrectly, but the accounts have been identified correctly for the entry, the examinee shall be awarded the point available for the accounting entry.

**Question 4**

(8 points)

Our company is **PICURI Kft.** (9400 Sopron, Kék utca 1, payment account number: 11756565-31313131; tax number: 11245555-2-07, managing director: Karola Kiss, person responsible for finances: Katalin Nagy).

In the interest of modernising production, on 15 June 2017 we purchased a **BENDA 150/230 CNC machine** from **Gépesítő Kft.** (8900 Zalaegerszeg, Fenyőfa út 4., payment account number: 11505426-02200042-04809437, tax number: 21471526-2-41, managing director: Róbert
Szabó, sales representative: Szilvia Fehér) The total amount on the invoice received was HUF 2 032 000 (VAT 27%), and the serial number of the invoice was GE 12345. Payment method: bank transfer; payment deadline: 5 July 2017, and the company submitted the payment order on 4 July.

A company commissioned the CNC machine purchased on 1 July 2017. The useful life of the machine is five years, its residual value is HUF 400 000 and depreciation is linear. The company books depreciation starting from the day of capitalisation. (One year = 360 days, one month = 30 days.)

In light of the above data, answer the following questions. Show the necessary auxiliary calculations.

1) Records of tangible assets purchased at our company:

<table>
<thead>
<tr>
<th>Name of business document:</th>
<th>tangible asset inventory form (1 point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical cost of tangible asset:</td>
<td>HUF 1 600 000 (1 point)</td>
</tr>
<tr>
<td>Depreciation of tangible asset for July 2017:</td>
<td>HUF 20 000 (1 point)</td>
</tr>
<tr>
<td>Net value of tangible asset as at 31 July 2017:</td>
<td>HUF 1 580 000 (1 point)</td>
</tr>
</tbody>
</table>

Auxiliary calculations:

\[
\frac{2 032 000}{1.27} = 1 600 000
\]

Annual depreciation: \((1 600 000 - 400 000) / 5 = 240 000\)

Monthly depreciation: \(240 000 / 12 = 20 000\)

\[\text{or } 240 000 / 360 \times 30 = 20 000\]

Net value: \(1 600 000 - 20 000 = 1 580 000\)

(No points may be awarded if no auxiliary calculations are shown.)

2) Initiation of the financial settlement of tangible asset purchase:

<table>
<thead>
<tr>
<th>Name of business document:</th>
<th>transfer order .............. (1 point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of issuing company, payment account number:</td>
<td>PICURI KFT. 11756565-31313131 (1 point)</td>
</tr>
<tr>
<td>Date of issue of the business document:</td>
<td>4 July 2017 (1 point)</td>
</tr>
<tr>
<td>Amount on the business document:</td>
<td>HUF 2 032 000 (1 point)</td>
</tr>
</tbody>
</table>
Question 5  (15 points)

Perform the following calculations related to financial operations. Mark the auxiliary calculations in each case. When solving the question, calculate to four decimal places. If needed, round HUF values to whole numbers.

1) You will not require your savings for 12 months, and therefore, based on your deposit agreement, you deposit HUF 250 000 at a credit institution. The credit institution determines its interest rates on the basis of its general contractual terms and conditions, which rates are shown in the table below.

<table>
<thead>
<tr>
<th>Term</th>
<th>Annual interest rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 6 months</td>
<td>4.5</td>
</tr>
<tr>
<td>For 12 months</td>
<td>4.8</td>
</tr>
</tbody>
</table>

a) How much interest do you earn on your tied-up funds if you fix your deposit every six months, and the credit institution does not capitalise interest?  (2 points)

Interest earned: HUF 11 250

Auxiliary calculation:

250 000 x (0.045/2) x 2 = 11 250

b) What will the value of the fixed deposit with interest added be, if capital is fixed at the credit institution for 12 months?  (2 points)

Deposit value: HUF 262 000

Auxiliary calculation:

250 000 x (1 + 0.048) = 262 000

2) The inflation rate in an economy is 2%.

Calculate the real interest-rate if the nominal interest rate is 4%.  (1 point)

Real interest-rate: 1.96%

Auxiliary calculation:

\[(1 + 0.04) / (1 + 0.02) − 1 = 1.0196 − 1 = 0.0196 \text{ that is } 1.96\%\]

3) You are planning to launch a business four years from now, the minimum capital requirement of which is HUF 2 000 000.

What amount do you need to deposit today at the credit institution with an annual deposit interest rate of 10% in order to ensure that the minimum capital is available in four years? Interest is capitalised.  (2 points)

Amount to be deposited: HUF 1 366 027 (1 point)

Auxiliary calculation:

\[2 000 000 / (1 + 0.1)^4 = 2 000 000 / 1.4641 = 1 366 026.9107\] (1 point)
4) The nominal value of the bond of a company is HUF 12,000. The price of this bond in the market is currently HUF 10 500. The nominal yield of the bond the 6%/year. 

**Calculate the simple yield of the bond.** 

Simple yield: 6.86% 

(2 points)

Auxiliary calculation:  

interest: 12 000 x 0.06 = 720 

(1 point)  

simple yield: 720 / 10 500 = 0.0686, that is 6.86% 

(1 point)

5) After dividend payment, and investor purchased 10 shares at a price of HUF 9 000 per share. In the year of purchase, the company issuing the share paid a dividend of HUF 585 per share. Starting from the year after, dividend is expected to be HUF 630 per share. The investor expects the price of the share to increase and that one year later (in the year following the purchase), they will be likely to be able to sell the shares at a price of HUF 9 500 per share. 

**Calculate the expected yield of the investment.**

Expected yield: 11.89% 

(2 points)

Auxiliary calculation:  

10 x 630 = 6 300  
10 x 9 000 = 90 000  
10 x 9 500 = 95 000 

(1 point)  

(6 300 + 95 000 – 90 000) / 90 000 = 0.1256 that is 12.56% 

(1 point)

6) Our company has sold finished goods to Austria at a value of EUR 10,000. Our buyer transferred our receivable for the sale to our account on 1 June 2017. At our account-holding bank, on 1 June 2017 the currency buy rate was 308 HUF/EUR and the currency sell rate was 312 HUF/EUR. 

**What HUF amount was credited to our payment account by the financial institution?** 

(2 points)

Amount credited: 

HUF 3 080 000 

Auxiliary calculation:  

308 x 10 000 = 3 080 000 

7) A Hungarian company has concluded an export agreement worth EUR 20 000. At the time of the conclusion of the agreement, the euro exchange rate was 311 HUF/EUR, and 315 HUF/EUR at financial performance. 

**Did the exchange rate change have a favourable or an unfavourable effect on the transaction of the Hungarian company?** Underline the correct word. Explain your answer. 

It had a favourable / unfavourable effect. 

Explanation: *After the depreciation of the forint, the company generated greater revenue, as it received more forints for the same amount of goods.* 

(Different wording that is correct in terms of content may also be accepted.)