FÖLDRAJZ ANGOL NYELVEN

EMELT SZINTŰ ÍRÁSBELI VIZSGA

2009. május 14. 14:00

Az írásbeli vizsga időtartama: 240 perc

Azonosító jel:

Pótlapok száma
Tisztázati
Piszkozati

OKTATÁSI ÉS KULTURÁLIS MINISZTÉRIUM
Important Information

The time allowed for the Examination Paper is **240 minutes**. The use of the Geography Atlas for Secondary Schools is not allowed. A calculator may be used if necessary, but the steps of problem solving should also be presented.

You can answer the questions **in any order**.

First, **read the questions carefully, think over your answer** then write your answer **in ink (with pen)** in the appropriate place. You can correct your answer if necessary, but no points can be awarded for your answer in the cases of equivocal or unclear corrections, cancellations or corrections made with a pencil.

Give the most adequate answers to the questions. More answers than required (e.g. naming three examples instead of the required two) are not awarded by extra points. The **total number of points** that can be awarded for tasks or subtotals are shown beside/below the tasks. **Please leave the grey squares blank.**
1. The figure shows the position of the Sun and the Earth on a notable astronomical date. The arrow points to the place where solar rays hit the Earth’s surface at a right angle. The value of angle $\alpha$ is $23.5^\circ$.

![Diagram of the Earth and Sun with angle $\alpha$]

a) Complete the figure below. Draw and write the following in the appropriate places in the figure.

- Equator, axis of rotation, Tropic of Cancer, Tropic of Capricorn, the North Pole

b) Which notable date can you identify by the position shown in the figure? Give the name of this notable date besides specifying the month and day of the date.

month: ..................  day: ..................  name of notable date: ..................

c) Define the term ecliptic that is shown in the figure in one sentence:

................................................................................................................

................................................................................................................

d) Put in the appropriate place in the figure …

1. a letter A, where local time is 12 o’clock at noon and the solar rays hit the horizontal surface at $90^\circ$.

2. a letter B, which is located south of the Tropic of Cancer, the solar rays hit the horizontal surface at $66.5^\circ$ and local time is 12 o’clock at noon.
2. Solve the problems on the comparison of two maps of different scales (1:500 and 1:45 000).
   a) Put the appropriate letter before the numbered statements using the scheme below.

   A) If the statement is valid for the map of scale 1:500.
   B) If the statement is valid for the map of scale 1:45 000.
   C) If the statement is valid for both.
   D) If the statement is valid for none.

   ..... 1. Scale typical of Hungarian tourist maps.
   ..... 2. A 9 km distance in reality is 20 cm on the map.
   ..... 3. A detailed map, representing terrain objects like a base plan.
   ..... 4. It represents the given portion of the spherical Earth in a plane.
   ..... 5. It is the scale of maps representing continents or continent parts.
   ..... 6. Regarding its content it can be a thematic map.

   6 points

   b) Prove by the help of calculations that the following statement can be valid for only one of the map types above.

   The base plan of a regular circle-shaped settlement of 50 km² area fits in the square-shaped map of a side length of 30 cm.

   The given town fits in only the map of scale ....................... Give details of your calculation and line of reasoning here. (Round up numbers in your calculations)

   4 points

   10 points
3. The figures below show a process, but the phases of the process are mixed up, therefore they do not follow each other in the correct sequence. Solve the problems after examining the figures.

**a)** Put the letters of the figures showing different phases in the correct sequence in the table.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
<td>5.</td>
</tr>
</tbody>
</table>

5 points

**b)** Which phases of the process are the following geographic formations associated with? Put the number of the formation on the line beside the letter of the appropriate figure.

*There is a formation that can be put into two places.*

1. East African Rift Valley (Eastern Rift Valley), 2. Mid-Atlantic Ridge

3 points
c) Name the sea which is currently evolving (developing) as a result of similar processes.
....................................................................................................................................................

1 point

d) Answer the questions on the basis of Figure A.
1. Where does the magma of the volcano come from? ................................................
2. Name the solidified rock. ..........................................................................................
3. What is the name of the typical, roundish rock formation having solidified underwater?
........................................................................................................................................

3 points

e) Describe the difference between the structure of a continental and an oceanic crust.
........................................................................................................................................
........................................................................................................................................

3 points

f) Decide whether the following statements are true or false. Put T (true) or F (false) next to the statements.

..... 1. Basaltic volcanism develops only at divergent plate margins.
..... 2. In the course of the activity of a stratovolcano lava is ejected onto the surface first then ejection of pyroclastic material (volcanic debris) follows.
..... 3. The South American and the African lithospheric plates are separated by the Mid-Atlantic Ridge.
..... 4. The speed of movement of lava is significantly influenced by the chemical composition of the molten rock.
..... 5. Lithospheric plate movements associated with the development of mid-oceanic ridges are not accompanied by earthquakes.

5 points

20 points
4. Answer the questions after carefully examining the figure.

![Diagram of a landscape with labeled points A to E.]

Source: http://www.fracademy.com/~mlechner/archive1999

a) Solve the problems.

1. Which capital letter indicates the estuary type characteristic of coasts with high tides? .........................

2. Which capital letter indicates the drainage divide of rivers labelled by A and D? .................................

3. Name the lake type labelled by C. ........................................................................................................

4. Group the rivers by their estuary types. Complete the headings of the table then write the names of the rivers in the appropriate column.
   Mississippi, Ganges, Elbe, Volga, Seine, Ob, Rhône

<table>
<thead>
<tr>
<th>Estuary type D</th>
<th>Name of estuary type: ..........</th>
<th>Estuary type A</th>
<th>Name of estuary type: ...........</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12 points

b) Solve the problems on the energy (capacity to do work) of rivers.

1. Describe the energy of the river in the section between E and F. Circle the correct answer.
   does not change increases decreases
2. Put the appropriate relation mark (<, >, =) between the factors to be compared.

At point **F**: The amount bedload to be transported [ ] the energy of the river

At point **E**: The amount bedload to be transported [ ] the energy of the river

3. What is the course type of the river at point **F**? ..........................................................

What feature shown in the figure supports your answer? ..................................................

5 points

**c)** In river sections labelled **1.** and **2.**, the cross section area of water-filled riverbeds of rivers are the same, but the speed of water in river **2.** is higher.

Which statement is valid for the rivers? Circle the letters of the two correct statements.

A) The discharge of river labelled by **1.** is greater in the given section.
B) The discharges of the two rivers are the same.
C) The discharge of river labelled by **2.** is greater in the given section.
D) It is not possible to tell the discharge difference based on the data provided.
E) River labelled by **2.** has higher gradient.

2 points

**d)** What is the type of the plain regarding its genesis (formation) that the river with estuary **D** flows through?

..................................................................................................................

1 point

20 points
5. Solve the problem after examining the maps and climate charts.
Fill in the table by the help of the map and the charts. Name the climate types and place them in the system of geographic zonality.

<table>
<thead>
<tr>
<th>Settlement</th>
<th>Climate</th>
<th>Its place in the system of geographic zonality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meekatharra</td>
<td></td>
<td>Belt / region</td>
</tr>
<tr>
<td>Brisbane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darwin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invercargill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mount Isa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12 points
6. The list below encompasses activities, phenomena and their consequences. Put the number of causes in the squares and the consequences of them in the adjacent circles. Put the term that is brought about by all of the listed factors in the centre of the figure.

<table>
<thead>
<tr>
<th>1. ever shorter fallow period</th>
<th>2. acidification of soil</th>
<th>3. desertification</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. deforestation</td>
<td>5. overland flow (sheet erosion)</td>
<td>6. ploughing parallel to slope</td>
</tr>
<tr>
<td>7. chemical plant pest control</td>
<td>8. acid rains</td>
<td>9. salinization of soils.</td>
</tr>
<tr>
<td>10. impoverishment of soils</td>
<td>11. overgrazing</td>
<td>12. over-irrigation</td>
</tr>
<tr>
<td>13. accumulation of chemicals</td>
<td>14. linear erosion</td>
<td></td>
</tr>
</tbody>
</table>

![Diagram](image-url)
7. The sketch map below shows a part of Europe. Solve the related problems after examining it.

![Sketch map of Europe](image)

a) Select the correct answers to the given questions. Put the appropriate letter in the box beside the question.

A) If answers 1., 2. and 3. are correct  
B) If answers 1. and 3. are correct  
C) If answers 2. and 4. are correct  
D) If only answer 4. is correct  
E) If all four answers are correct

1. Which sea/sea/ channel do the rivers shown in the sketch map flow into?
   1. Baltic Sea
   2. the English Channel
   3. Black Sea
   4. North Sea

2. Which countries are shown either fully or partly in the sketch map?
   1. Belgium
   2. Luxemburg
   3. Germany
   4. Sweden

3. Which countries are not shown either fully or partly in the sketch map?
   1. the Netherlands
   2. the Czech Republic
   3. the United Kingdom
   4. Austria

4. Which industrial regions are located in the area shown in the map?
   1. Lorraine (Lotharingia)
   2. North Atlantic Industrial Region
   3. Ruhr region
   4. Silesia

4 points
b) Name that capital city among the cities labelled by numbers which is located in the smallest country and is the seat of a number of institutions of the European Union.

The number of the city in the map: .... The name of the city: ......................................

2 points

c) Name those three cities among the cities labelled by numbers, which are the seats of the royal families of monarchic states (kingdoms).

The number of the city in the map: The name of the city: ......................................
The number of the city in the map: The name of the city: ......................................
The number of the city in the map: The name of the city: ......................................

6 points

d) Fill in the table on cities and rivers:

<table>
<thead>
<tr>
<th>The number of the city on the map</th>
<th>The name of the city</th>
<th>The river it lies by</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>XXXXXXX</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7 points

19 points
8. Solve the problems after examining the sketch map.

a) Which part of Asia is shown by the sketch map regarding the points of the compass?
..........................................................................................................................................
1 point

b) Name the regions labelled by Roman numbers in the map.
I. ...........................................  V. ...............................................  
II. ...........................................  VI. ...............................................  
III. .........................................  VII. ...............................................  
IV. ...........................................
7 points

c) Name the hydrographical elements labelled by small letters in the map.
 a) .....................................................  b) .....................................................
 c) .....................................................  d) .....................................................
 e) .....................................................  Sea
5 points
d) Name the countries labelled by capital letters in the map.
   
   A) ....................................................
   B) ....................................................
   C) ....................................................

   3 points

e) Name the cities labelled by numbers in the map.

   1. ....................................................
   2. ....................................................
   3. ....................................................
   4. ....................................................

   4 points

9. Decide which process do the statements refer to. Put the appropriate letter before the number of the statement.

   A) Urbanisation in developed countries
   B) Urbanisation in the countries of the developing world
   C) Both of them
   D) None of them

   ..... 1. Its rate was the highest in the 19\textsuperscript{th} century.
   ..... 2. Migration to towns was triggered by the drop in the carrying capacity of agriculture and the overpopulation of rural settlements.
   ..... 3. Its process was speeded up from the second half of the 20th century.
   ..... 4. As a result of migration to towns squatter settlements (shanty towns) developed.
   ..... 5. The process was triggered by the development of industry and services and the growing manpower demand thereof.
   ..... 6. Its consequence is the growing ratio of urban dwellers.
   ..... 7. The current global-scale change in the ratio of urban dwellers can be attributed primarily to this process.
   ..... 8. The process was not accompanied by the adequate development of infrastructure and the improvement of housing conditions.
   ..... 9. Beside migration high natural population growth also contributes to urban population growth.
   ..... 10. In the course of the 20th century the focus of the process shifted to suburbs. (Suburbanisation started).
   ..... 11. Due to the renovation of slum quarters the moving back to these parts of town can be observed.
   ..... 12. It is induced by the change of settlement function.
   ..... 13. The current urban structure of Sao Paulo was created by this process.

   13 points
10. Search for African examples matching the descriptions in the table using the given word list. Put the name of the relevant region or country on the dotted lines beside the numbers. You cannot match every term.

*Congo Basin, Tunisia, Egypt, Chad, Namib Desert, Nigeria, Libyan Desert, Republic of South Africa, the Sudan, Kenya, Algeria.*

<table>
<thead>
<tr>
<th>Description</th>
<th>Name of country</th>
<th>Name of region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical desert on the southern hemisphere.</td>
<td>——</td>
<td>1. ………………..</td>
</tr>
<tr>
<td>Famine stricken landlocked country.</td>
<td>2. ………………..</td>
<td>——</td>
</tr>
<tr>
<td>Development opportunities are provided by revenues generated by tourism and transit fees of the Suez Canal.</td>
<td>3. ………………..</td>
<td>——</td>
</tr>
<tr>
<td>Region most stricken by the problems of the Sahel belt.</td>
<td>——</td>
<td>4. ………………..</td>
</tr>
<tr>
<td>A country of Black Africa whose GNP for the most part is generated by crude oil export.</td>
<td>5. ………………..</td>
<td>——</td>
</tr>
<tr>
<td>The country richest in mineral resources on the continent.</td>
<td>6. ………………..</td>
<td>——</td>
</tr>
</tbody>
</table>

6 points

11. **Decide whether the following statements are true or false. Put **T** (true) or **F** (false) next to the statements.**

..... 1. Most of the developing countries are already over the peak of population explosion therefore the rate of global population growth slowly decreases.

..... 2. Natural population growth is influenced by infant mortality rate, too.

..... 3. Global population growth is primarily dependant on demographic trends of developed countries.

..... 4. Natural population decrease arises when the combined number of deaths and emigration exceeds the number of live births.

..... 5. In the coming decades overpopulation can be expected in developed countries, too.

5 points
12. Answer the questions regarding the Great Plain.

a) Name the regions of the Great Plain labelled by numbers.

1. ......................................................... ...
2. .......................................................... ...
3. .......................................................... ...
4. .......................................................... ...
5. .......................................................... ...
6. ......................................................... ...

6 points

b) Group the regions on the basis of the given criteria. Put the numbers of the regions in the appropriate places. One region can only be put into one place.

Flood plain: .................................................................
Region with loess cover: ..................................................
Alluvial fan area: .........................................................

6 points

c) Which regions are the statements below typical of? Answer by putting the number of the appropriate region/regions in the boxes. It is possible that one statement has multiple matching numbers, but writing more answers than it is correct is penalised by point deduction.

A) Part of its territory was elected a UNESCO World Heritage Site.
B) Its natural endowments are remarkably favourable for maize cultivation.
C) Its territory belongs to the North Hungary statistical region.
D) Its landscape was principally formed by wind (eolian processes).
E) The highest point in the Great Plain is located in its territory.
F) The typical fruit of the region is apricot.
G) It has significant hydrocarbon reserves.

10 points

22 points
13. One of the listed geographic terms differs from the rest in a geographical sense, so it is an “odd man out” (“cuckoo’s egg”). Select this term. Afterwards support your answer by giving the uncommon (special) characteristic of the selected term and the common characteristics of the other terms.

Example: The Bakony does not fit into the list because it is the member of the Transdanubian Mid-Mountain range while the rest are the members of the Northern Mid-Mountain range.

Cannot be accepted as complete reasoning: The Bakony does not fit into the list because it is the member of the Transdanubian Mid-Mountain range while the rest are not. Or: the Bakony does not fit into the list because it is not the member of the Northern Mid–Mountain range while the rest are.

a) Slovenia, Hungary, Austria, Germany

………………… does not fit into the list because ……………………………,,
while the others ……………………………

3 points

b) Záhony, Kőszeg, Hegyeshalom, Sopron

………………… does not fit into the list because ……………………………,,
while the others ……………………………

3 points

c) Antwerp, Odessa, Duisburg, Goteborg

………………… does not fit into the list because ……………………………,,
while the others ……………………………

3 points

9 points
14. On the 31st of January 2006 a report on the economy of Megaland came out in a daily newspaper. However, certain words of the report were deleted from the text due to the error of the printing house. Read and complete the imperfect text by putting the appropriate terms in the relevant places and solve the problems afterwards.

Some important economic data of Megaland:

<table>
<thead>
<tr>
<th>Population on the 31st of December 2004: 5 million</th>
<th>Natural population growth rate: 5‰</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population density: 100 heads/km²</td>
<td>Life expectancy at birth: 78 years</td>
</tr>
</tbody>
</table>

a) The report:

In order to protect the domestic market the tax levied on imported foodstuffs, namely the 1. ....................... was raised. Since this measure did not deliver the expected result, 2. ....................... namely quantitative restriction was imposed on imported foodstuffs. In that year Superland violated the economic agreement between the two countries, therefore the government of Megaland prohibited the import of products from Superland, that is to say it imposed a/an 3. ....................... on the country. In the summer the WTO condemned the government of Megaland for impeding free trade and for its 4. ....................... economic policy and urged the lifting of restrictions. The economic measures are expected to have an impact on the foreign trade balance of the country only in the long run. In 2006 the value of exports was 12 million euros, while that of the exports was 13.8 million, so the balance of foreign trade was still 5. ....................... 

In 2005 prices rose by an average of 8% thus producing an inflation figure 2% less than in 2004, when inflation was still 10%. Trade unions achieved a 6% rise in wages in that year, therefore the purchasing power of wages has 6. ....................... 

Judgement of the currency of the country (mega) has also changed. In early 2005 1 euro was worth 110 megas, but by December the exchange rate was 130, thus the currency was significantly 7. .......................
b) It was promising, however, that the GDP was 105% as percentage of the value of the previous year, so it grew from 25 billion dollars of the previous year to
1. ........................ dollars.

By the end of 2005 the GDP/capita value has reached
2. ........................ dollars.

_Do your calculations here:_

While Hungary steps on the brake, the world passes by her – revealed by the autumn report of the International Monetary Fund (IMF). While global growth prospects were rounded up, GDP growth of our region is expected at 5.2% this year and 4.6% in 2007. Within the region the Czech Republic and Slovakia are predicted to increase their economic growth, while Hungary, Poland and Slovenia are predicted to grow at a slower rate. In the case of Hungary a 4.5% GDP growth is forecast for this year and 3.5% for 2007 by the Monetary Fund. In the countries of the region the deficit of the balance of payments as percent of the GDP increase to 3.4% in 2006 and decreases to a somewhat lower level at 3.3% by 2007. The deficit of the balance of payments of Hungary is predicted to be 9.1% this year and 8% next year according to the IMF. The international financial organisation sees the increase of short term debts and deficit of the budget as risk factors in this field. It recommends the „mixed package” of financial consolidation, appropriate financial market regulation and easing of the labour market as a usual method to diminish financial risks.

They point it out: “Fiscal consolidation is necessary to sustain investors trust and to avoid the growth of the deficit of the state budget. This is the most urgent task in Hungary where the deficit may reach the 10% of the GDP. “

(MTI)
a) Decide whether the following statements are true or false. Put T (true) or F (false) next to the statements.

...... 1. In 2007 the economic prospects for the Central European Region are more favourable than that of the whole world economy.

...... 2. The economic growth rate projected for Hungary in 2007 exceeds the expected growth rate of the Euro zone.


...... 4. Experts considered the economic prospects of France to be the best among the listed countries of the Euro zone.

...... 5. The deficit of the state budget of Central European countries will expectedly rise further in 2007.

...... 6. The growth prospects of the world economy can mostly be attributed to the higher economic growth rates of the developing countries.

...... 7. According to expectations the deficit in the balance of payments of Hungary may decrease by more than 1% in 2007.

7 points
b) Which international organisation is the International Monetary Fund the special expert organisation of?

..........................................................................................................................................

1 point

8 points

Total points in the examination paper:: 200 points
<table>
<thead>
<tr>
<th>Number of task</th>
<th>Total points</th>
<th>Student’s points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Total number of points of the examination part
(Number of points attained in the examination paper divided by two and rounded up.)

100

Examiner
Date: ........................................

Registrar of the Board of Examiners/jegyző
Date/Dátum: .....................................