



8th Hungarian Geographical Contest

2nd Round

Written Test

Question and Answer Booklet

10 December, 2016

Password:

Date of Birth:



Instructions for Students

1. Fill in your password and your date of birth on the front page of this Booklet and on the top of all pages as well.
2. The test consists of 6 Sections.
3. The maximum total: 100 points. There is a maximum of 15 marks for each Section.
4. Only the required number of answers (reasons, examples etc.) will be accepted in the order they are written. For instance, if the question asks for 2 reasons and you give more than 2, only the first 2 reasons will be marked.
5. Where appropriate, please, write sentences or phrases not single words.
6. All questions should be answered in the spaces provided in this booklet.
7. You can find all the sources (maps, figures) referred to in the Source Booklet.
8. You might need a calculator during the test.
9. You have 180 minutes available to answer all the questions.

Good luck!

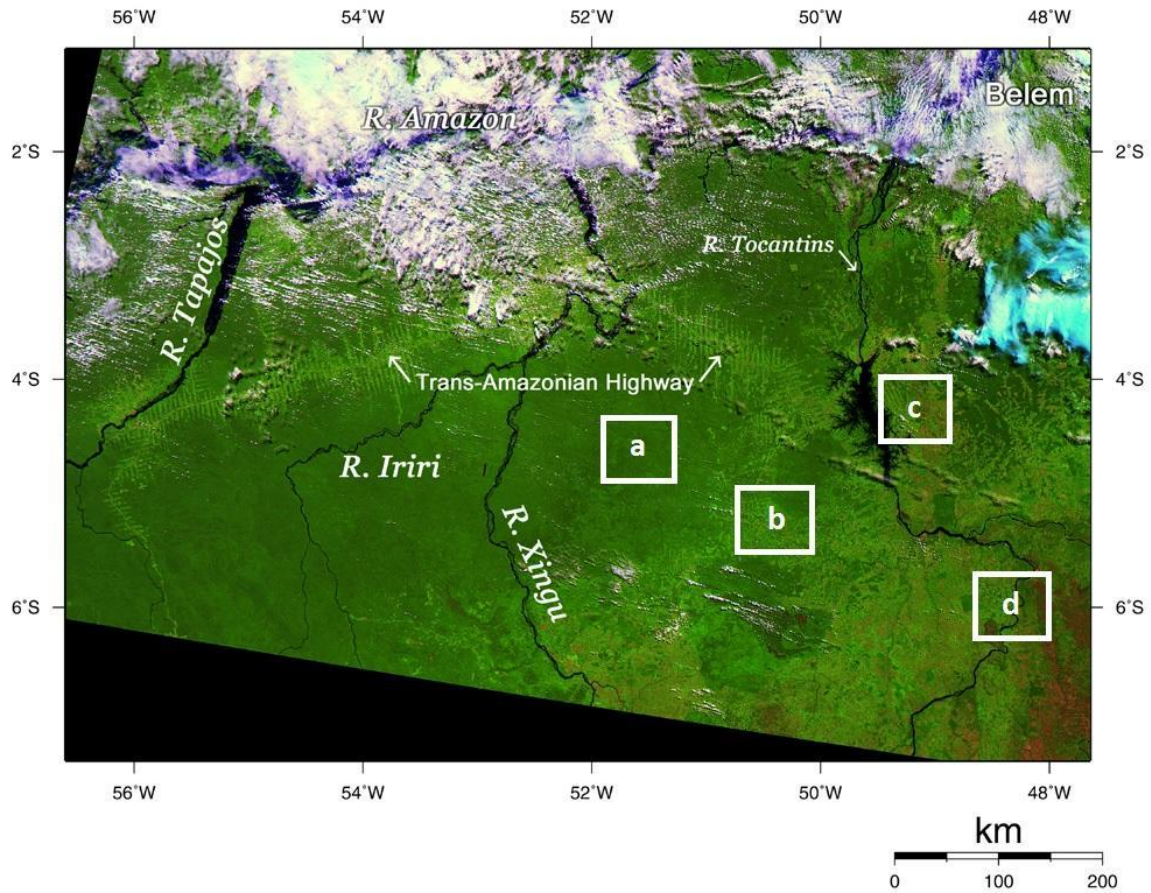
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Section A: Deforestation - The Trans-Amazonian Highway



(http://www.eorc.jaxa.jp/en/earthview/2003/img/tp030904_02.jpg)

1. Identify the **natural objects** presented with the following colours in the satellite image! (0.5 point each = 2 points)

- a. Dark green:
- b. Light green:
- c. Black:
- d. Reddish brown:

2. a. Explain the link between **deforestation** and **desertification**! Name two reasons of deforestation caused by humans! (3 points)

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Cause 1:

Cause 2:

- b. Draw one circle , which **shows deforestation** on the map! (1 point)

3. Recently **global-scale satellite** observation has been essential to follow-up environmental changes on Earth. Name two other natural and one social changes where these technologies are also useful !! (3 points)

Natural 1:

Natural 2:

Social:





4. The Trans-Amazonian Highway Project started in the 1970s. Brazil planned a 2,000-mile highway, which cuts across the Amazon forest. As usual, some groups in society had different motivations to support or reject the project.

Write two possible impacts or reasons why they had positive/negative view on construction!

Which groups do you think supported and which were against the Highway? Indicate your choice in the third column!

Study Figure A1 in the Source Booklet about the background! (6 points)

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Groups	Impacts/Reasons	Supporters or opponents (Write S or O!)
Farmers/ranchers/miners 	1. 2.	
Indigenous people 	3. 4.	
Environmentalists/researchers 	5. 6.	
Developers 	7. 8.	

15 points:

B: Global thinking with biogeography

1. a. Study Figure B1 in the Source Booklet! We have **9 pictures and 9 hints for the locations of the photos**. Give the letter of the photo! (4.5 points)

1. Tea is yummy and famous from this island, located at the southern tip of a subcontinent.

Letter of the photo:

2. Rusty elephants...or are they simply dirty? Nope, neither of the guesses are right...they are subspecies of Asian elephants living in one specific island...but where exactly?

Letter of the photo:

3. We are located in the longest mountain range of the Earth. Our name comes from Charles Darwin's colleague and friend....actually he was the captain of a ship named after an English dog breed.

Letter of the photo:

4. I am the largest conifer in my own continent (and actually on my hemisphere). My scientific and English name comes from the captain of HMS Beagle.

Letter of the photo:

5. Tree size ferns? And my scientific name is *Dicksonia antarctica*....isn't that weird? All right, the hemisphere is OK in my scientific name.

Letter of the photo:

6. I need to pile up some food before the first snow...or the next volcanic eruption of former Mt. Mazama?

Letter of the photo:

7. Why are you looking at me? I am the smartest bird on Earth..and the only alpine parrot. Do you think I live down under? Yeah, in the Southern Alps!

Letter of the photo:

8. Throw away your chainsaw! I am the largest creature on Earth!

Letter of the photo:

9. This picture must be familiar as one of the lockscreens of Windows 10. The *Podocarpus* trees give you a hint of the hemisphere. This glacier flows down from the 3rd largest ice cap of the world.

Letter of the photo:

1.b. We have **4 pictures from two islands** and **5 pictures from two continents**. Answer the following questions:

a. How many pictures were taken in the southern hemisphere? (1 point)

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b. Obviously, in one of the continents three pictures were taken. Name this continent! (1 point)

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c. Name the major morphological feature (whitish-bluish-coloured) on picture (f)! (1 point)

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d. Name the major morphological feature in the background of picture (c)! (1 point)

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- e. There are three states along the west coast of the US. Two of the pictures were taken in two of the states. Which state is *not represented* here among the three? (hint: This state was named after the first president of the US) (1 point):

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- f. Name the two islands and the two continents where the pictures were taken! (4 points):

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- g. What was the name of Darwin's ship with which he sailed across the globe? (1.5 points):

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15 points:

Section C: Hazards and risk assessment

1. Study Figure C1 in the Source Booklet showing the **natural hazards** occurring on the Island of Riziking! (5 points)

a. Name the natural hazards, which **symbols are shown** in the circles! (2.5 points)

1:

2:

3:

4:

5:

b. Identify the **natural hazard that could not co-occur** with the others on the island! (0.5 point)

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c. Specify which **archipelago** the Island of Riziking could belong to considering that it has a total area of 15.000 km²! (1.5 points)

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d. Specify the **origin** of the Island of Riziking! (0.5 point)

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2. Study Figure C2 in the Source Booklet showing diagrams about **risk assessment**! (5 points)

a. Match the **terms** with the **definitions** below! (3 points)

Hazard: (1 p) **Vulnerability:** (1 p) **Risk:** (1 p)

A = Number of lives, property value, economic capacity, etc. exposed to the given phenomenon.

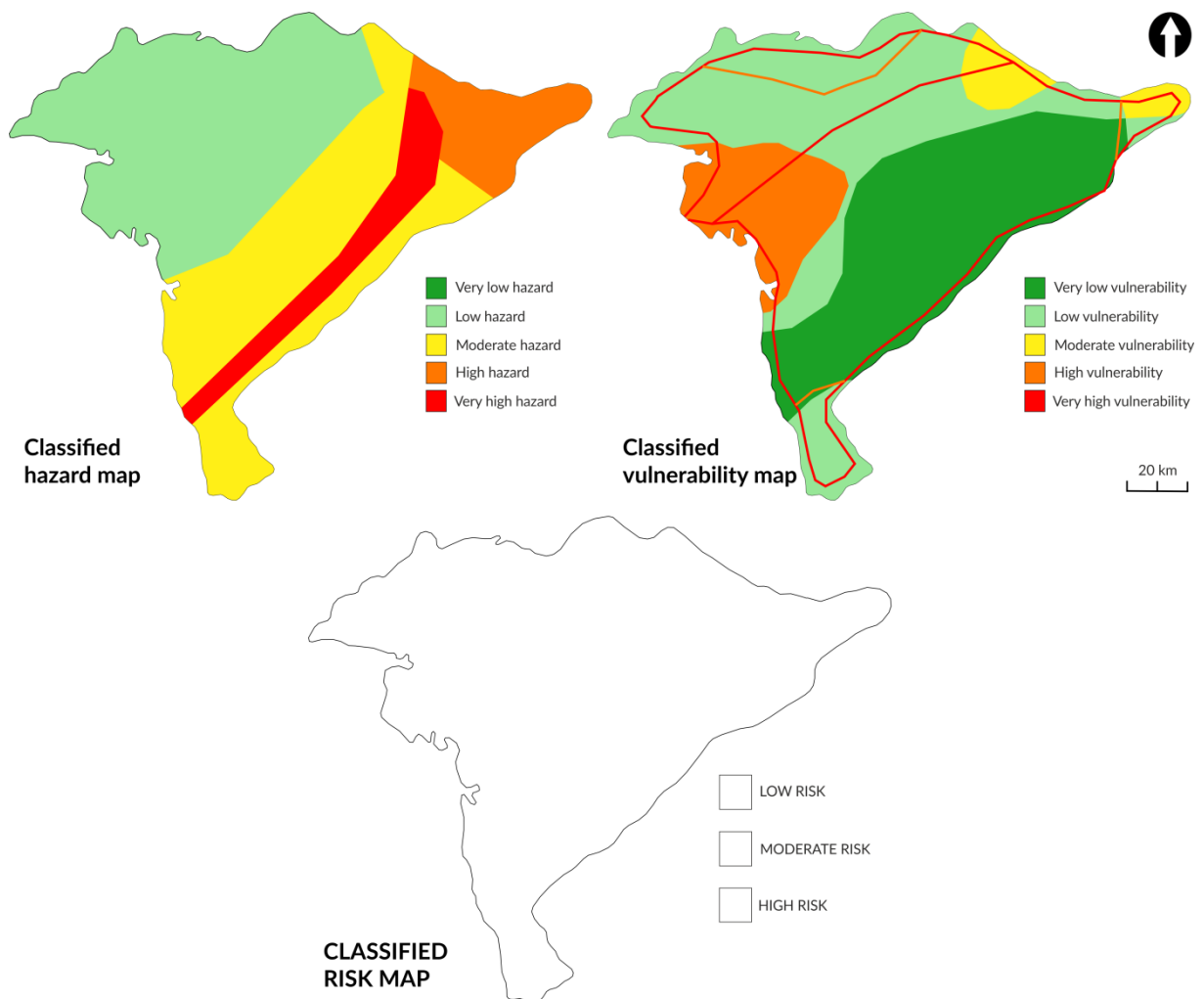
B = The probability of a damaging phenomenon to occur that is capable of causing loss of life and property, or adverse environmental impacts.

C = Relates to the severity of social, economic and environmental impacts posed by the damaging phenomenon.

- b. Explain the **relation between the magnitude** of a damaging phenomenon and the **risk** it poses! (2 points)

3. Study the presented classified **hazard map** and **vulnerability map** of the Island of Riziking! (5 points)

- a. **Draw the risk map** of the island! Specify the legend of your map! (3 points)



- b. **Outline the differences** between the classified hazard and vulnerability maps! Explain how they **affect** the risk map! (2 points)

15 points:

Section D: Planned capitals in a changing world – urban sprawl in Canberra

1. Planning a new capital is a huge project. Write **three geopolitical reasons** why governments decide constructing a new capital! (3 points)

Reason 1:

Reason 2:

Reason 3:

- b. Name **two capital cities**, which were constructed in the 20th century! (2 points)

South America:

Asia:

2. On a map which elements can show that a **city is planned**? Name one element from your lexical knowledge! Study **Figure D1** in the Source Booklet. Give the picture's number, which represents the planned district! (2 points)

Map element:

Picture Number:

3. a. Which **non-renewable energy** is responsible for the high speed of urban sprawl? (1 point)

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- b. Study **Figure D2** in the Source Booklet, which shows the proportional travel modes to work in large Australian cities.

What characteristic of the chart refers that **urban sprawl is widespread** in Australian cities? Give the right colour of column! (1 point)

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c. How can be the **proportion of the red column** increased? (1 point)

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4. Urban sprawl has numerous effects and not all are positive. Elaborate why physical expansion can be **disadvantageous** for cities. (5 points)

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15 points:

Section E: Boy or Girl? Gender bias and the status of women in India

1. Study Figure E1 in the Source Booklet, which shows the sex ratio (number of females/males) **changes in India** and Figure E2. Answer the questions below!

a. What tendencies can you observe on the graph? (2 points)

Tendency 1:

Tendency 2:

b. What are the probable causes of this tendency in the case of total population? Name one! (1 point)

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c. What are the probable causes of this tendency in the case of 0-6 age group? Name one! (1 point)

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2. There is a saying in India: "Raising a daughter is like watering your neighbour's garden". Study Figure E3 and explain what **can be the reasons behind this saying?** (2 points)

Reason 1:

Reason 2:

3. Study Figure E4 in the Source Booklet and describe the probable **socio-cultural and economic reasons** behind this situation (using all sources) in a half-page essay! Suggest some possible solutions for this problem! (9 points)

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15 points:

Section F: Urban economy - The Happy Goods Shop

Study Figure F1 in the source booklet!

You are the lucky owner of a small enterprise, the Happy Goods Shop, which is a small grocery. As you take care of your customers, you lay up the goods every morning, so they can buy fresh and healthy products. However, as a small enterprise, your budget is limited.

You have to decide according to some calculations and other aspects, from where you get the goods every morning. Look at the questions below!

1.a. According to the following data and to the information given on the map calculate, **which route and which source would be the most optimal** to get the products to your shop.

You have three opportunities to choose from: Hypermarket 1 or 2, and the Local Market place. Write down all your calculations into the space provided and highlight the route, you found optimal. Your final solution should be the place of supply, which you are asked to name below! (2 points for the calculations, 1 point for the correct solution, total 3 points)

Your vehicle: Fiat Talento

Fuel consumption: 8 l/100 km

Calculate here:

The optimal origin of supply:

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1.b. You are thinking of getting all the supply from the local market. Give three arguments for, and three against **buying the goods from the local market!** Make sure you take a stand on both sides, for and against the local market. (1 point each, total 6 points)

Arguments for	Arguments against
1.	1.
2.	2.
3.	3.

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1.c. As a 21st century entrepreneur, you are about to run your enterprise according to sustainable development. What can you do for **social sustainability**?

Firstly, explain a social problem that could arise in the city, and then explain what you can do against it, in the frames of social sustainability! Do not forget to discuss, why your solution is socially sustainable. (2 points for the social problem defined, 4 points for the correct explanation, total 6 points)

Social problem:

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Solution:

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15 points:

All sections 100 points:

THE END