

GEOGRAAFIA RIIGIEKSAM

3. JUUNI 2013

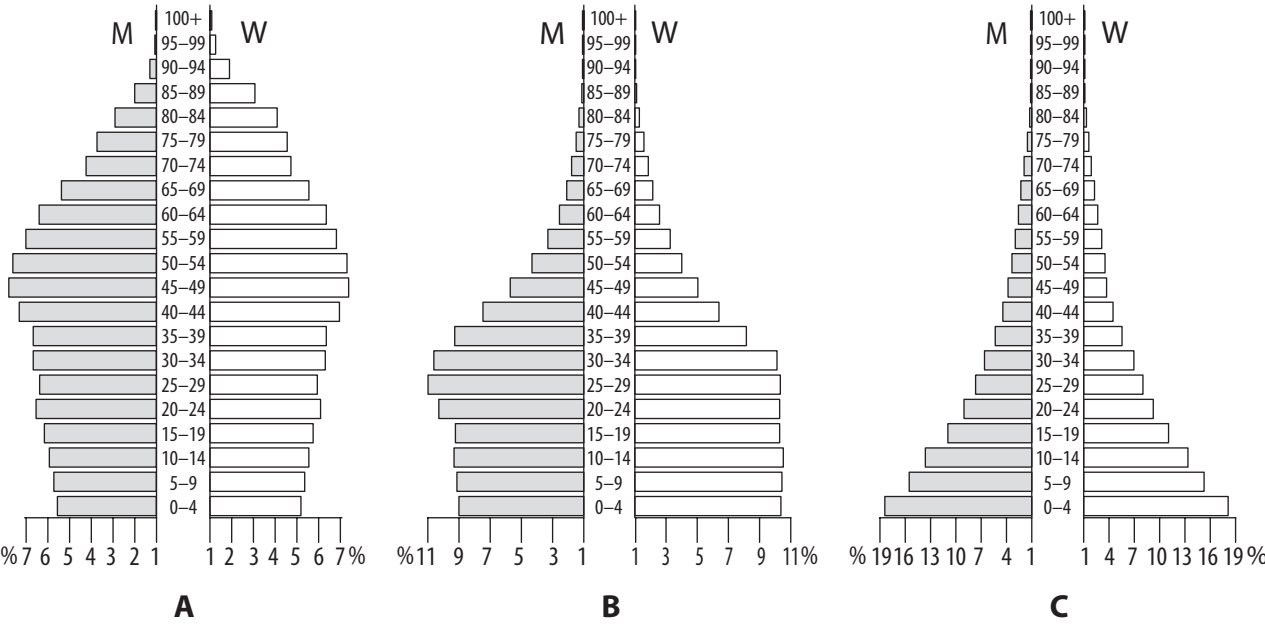
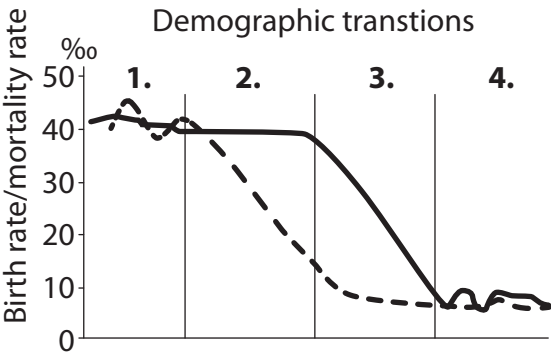
REMINDER

1. Make sure that your exam paper is a complete set of 26 tasks on 16 pages. If the paper is defective, turn to the examination board for replacement.
2. Read the instructions carefully, think about your answer before you write it down. The written answer should be short and unambiguous. Use black or blue pen or ink to write your examination paper. Answers in pencils are not accepted.
3. To change the answer already written, cross the wrong one out and write the correct answer next to or above it. You are not allowed to overwrite an answer or use the correction pen.
4. There are extra pages for draft at the end of the examination paper.
5. Boxes next to questions are for the grader.
6. If national examination grading board discovers the use of outside help or cheating by the examinee, the exam is automatically considered as a failure and 0 point score is written on the national examination report card.
7. Take your time, don't hurry, you have 3 hours (180 minutes) to write the paper.

Good luck!
Examination board

1. Use info from the table and figures to answer the questions.

Population indicators in 2011	Mali	Saudi-Arabia	Belgium
Age group 0–14 years	47%	29%	16%
Age group 15–65 years	50%	68%	66%
Age group over 65 years	3%	3%	18%
Birth rate	45‰	19‰	10‰
Mortality rate	14‰	3‰	11‰



Name countries that each of the population pyramids depict. Write letters **A**, **B** or **C** in corresponding box.

Mali _____ 1 p
Saudi-Arabia _____ 1 p
Belgium _____ 1 p

Which demographic stage of transition is Mali in? Mark the right answer with **X**.

- A. ☐ Stage 1
B. ☐ Stage 2
C. ☐ Stage 3
D. ☐ Stage 4

What was natural increase in Saudi Arabia in 2011? _____ ‰ 5

In what way was the total number of population in Belgium influenced by natural increase in 2011?

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1 p

1 p

1 p

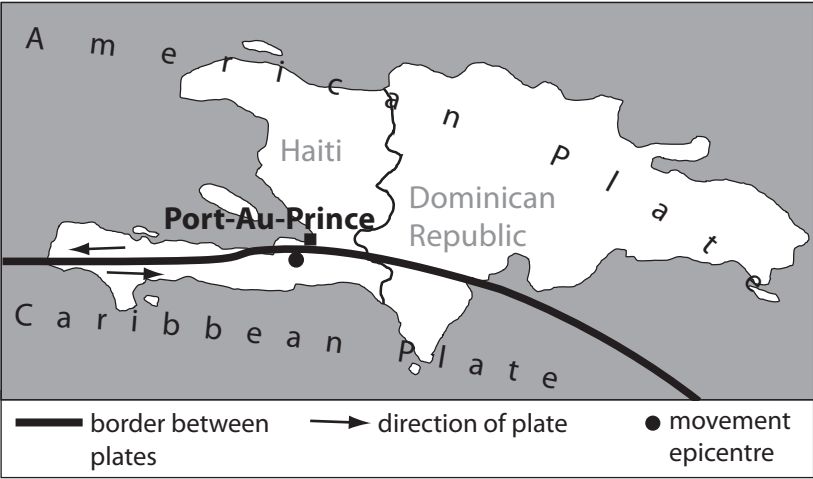
1 p

1 p

1 p

25. Haiti is a North American insular country in the Caribbean Sea. Haiti is the poorest country in the Western Hemisphere. Its history is full of political violence and dictatorships. Most of the country is unproductive. The country is overpopulated: 10 million people live on 27 748 square kilometres.

On Jan 12, 2010 at 16.53 local time an earthquake of magnitude 7 took place in Haiti. Its epicentre was about 25 km from Port-au-Prince, the capital; 13 km underground. Capital of Haiti was turned into ruins and 200 000 people perished.



What is an earthquake? Explain. _____

Why can so strong earthquakes take place in Haiti? Explain in several sentences. _____

What caused so huge human loss in Port-au-Prince?

- 1) _____
- 2) _____
- 3) _____
- 4) _____

Give 2 examples to explain what possible changes could earthquakes create in natural environment.

- 1) _____
- 2) _____

26. Explain plate movement theory using the following facts.

Coal is found in Antarctica. _____

There are active volcanoes on the Hawaiian Islands, situated in the middle of the Pacific Plate.

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1 p 76

1 p 77

2 p 78

2 p 79

1 p 80

1 p 81

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2. What is demographic explosion? Explain. _____

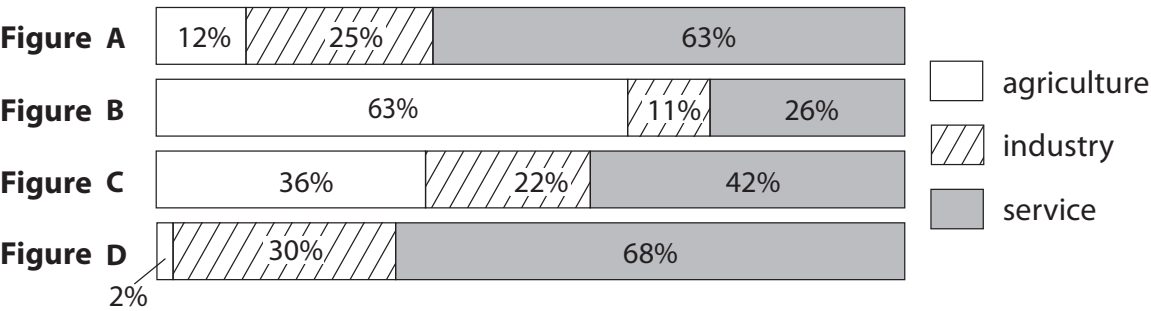
Give reasons for demographic explosion? _____

What possible problems could demographic explosion cause in a country? Bring an example!

3. Why do the cities in less developed countries grow faster than in advanced countries?

- 1) _____
- 2) _____

4. Figures depict occupation of population among working age population in Germany, Saudi Arabia, Turkey and Bangladesh.



What characterises occupation structure in Germany? Mark the correct answer with **X** in corresponding box.

- A. ☐ 11
B. ☐ 11
C. ☐ 11
D. ☐ 11

Which figure characterises occupation structure in Bangladesh? Mark the correct answer with **X** in corresponding box.

- A. ☐ 12
B. ☐ 12
C. ☐ 12
D. ☐ 12

How does the occupation characterises development level of the country? Explain!

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1 p 7

1 p 8

1 p 9

2 p 10

1 p

1 p

1 p 13

5. How many people live on the Earth now? Mark he most exact figuure with **X**.
- A.

14

6,1 th. million
- B.

14

7,1 th. million
- C.

14

8,1 th. million
- D.

14

9,1 th. million
- E.

14

10,1 th. million

6. Which abbreviation depicts Organization of Petroleum Exporting Countries? Mark the correct answer with **X**.
- A.

15

WTO
- B.

15

ASEAN
- C.

15

NAFTA
- D.

15

OPEC
- E.

15

APEC

7. Compare foreign trades of Japan and Bangladesh in 2011.

	Japan	Bangladesh
Population	128 million	153 million
Total value of exports	801 thousand million USD	24 thousand million USD
Total value of imports	795 thousand million USD	32 thousand million USD
Main export commodities	Vehicles, machines, equipment, electrotechnical and electronic goods, chemicals.	Jute fibre* and products, clothes, leather, fish, tea, tobacco.
Main imports	Fuels, metal ores, machines, chemicals, food and textiles.	Oil products, grains, means of transportation, equipment, steel, chemicals.

* Jute is the most widely used natural fibre in the world after cotton.

- a) Volume of foreign trade per capita:
- b) Balance of foreign trade:
- c) Structure of foreign trade:

What problems could such a balance and structure of foreign trade cause for economy of Bangladesh?

1)

2)

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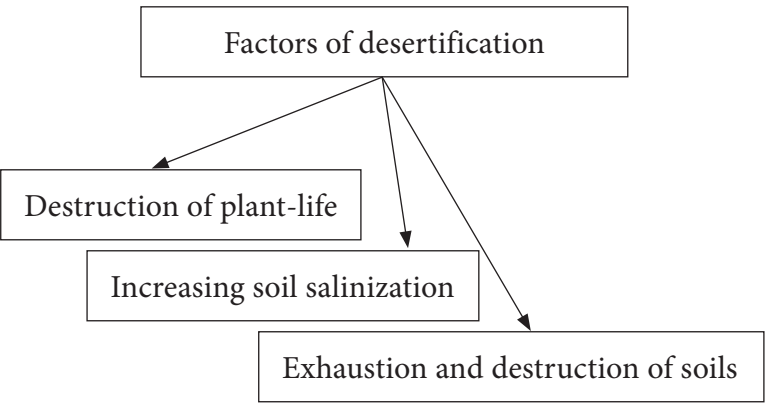
1 p

1 p

23. Compare weathering in alpine regions and in deserts.

	Alpine regions	Desert
Explain the influence of dominant weathering factor.		
What kind of weathering dominates?		

24. **Sahel** is a region on the borderline between the Sahara Desert and savannas. The desert moves ~a couple of kms south every year. More and more productive agricultural land turns into deserts in Mali, Nigeria, Chad, Sudan and Ethiopia.



Population in Sahel region (mln)			
Country	Year		
	1950	1995	2005
Ethiopia	20	52	67
Sudan	9	30	35
Chad	3	6	9

Bring four examples how human activities have favoured desertification in Sahel region.

- 1)
- 2)
- 3)
- 4)

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2 p

1 p

21. Prove the following statements.

Ocean water on latitudes of tropics is saltier than on the Equator because _____

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1 p

66

Water seeps through gravel soils more quickly than through clay soils because _____

1 p

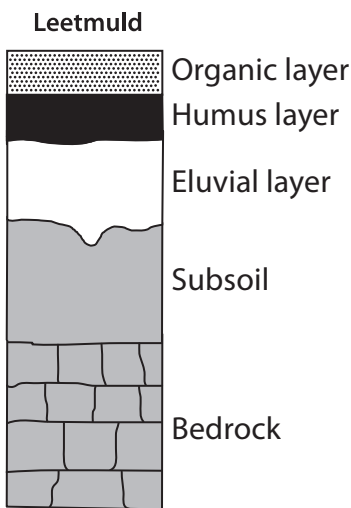
67

In karst regions, e.g. on *Pandivere* Upland in Estonia can ground waters get easily polluted because _____

1 p

68

22. Explain the conditions in which eluvial horizon can be formed in soils and how.



Conditions: _____

How: _____

1 p

69

1 p

70

Which natural zone are podsols typical of? Mark the correct answer with **X**.

- A.

71

 Desert
- B.

71

 Temperate grasslands
- C.

71

 Temperate coniferous forests
- D.

71

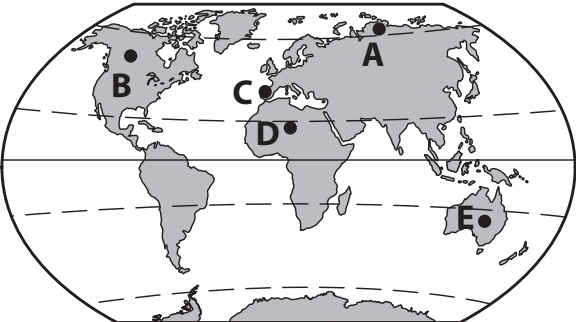
 Tundra
- E.

71

 Mediterranean scrub regions

1 p

In which place marked on the map are podsols typical of? Mark the correct answer with **X**.



- A.

72
- B.

72
- C.

72
- D.

72
- E.

72

1 p

8. Use information given about Singapore to answer the following questions.

Area: 699,4 km²
Number of population: 4,6 million
Density of population: 6653 in/km²
GDP per capita: 53143 USD (2009. a)

- Essential roles in economy of Singapore have marine transport, air transport, transit trade, casino business, tourism and these branches of industry that use imported raw materials, first of all production of electronics and pharmaceuticals
- Singapore exports 2/3 of its industrial production. 37% of total production of industry is covered by electronics in that country.
- Port of Singapore is among the biggest in the world. 130 000 commercial ships pass the port every year. Its ship registry lists 3000 commercial vessels.
- Singapore Chang Aiport is connected to 200 cities in 60 different countries. 5100 regular flights are serviced weekly.
- About 9 million tourists visit Singapore every year. About one million of them are cruise tourists.
- Singapore is the fourth biggest financial centre in the world. It has an international stock market as well as commodities and currency market. Many internatonal financial and insurance companies are located in Singapore.
- 800 000 foreign workers and their family members live in Singapore.



Singapore is among the most globalised countries in the world. Using the given info explain what is globalisation. Give 2 examples.

2 p

20

What has favoured development of Singapore into one of the biggest transit centres of the world?

1 p

21

Explain the role of port in Singapore's economy.

- 1) _____
- 2) _____
- 3) _____

3 p

22

Why is electronic industry so successful in Singapore?

1 p

23

9. What is high-tech industry?

1 p

24

Give 2 examples of high-tech products.

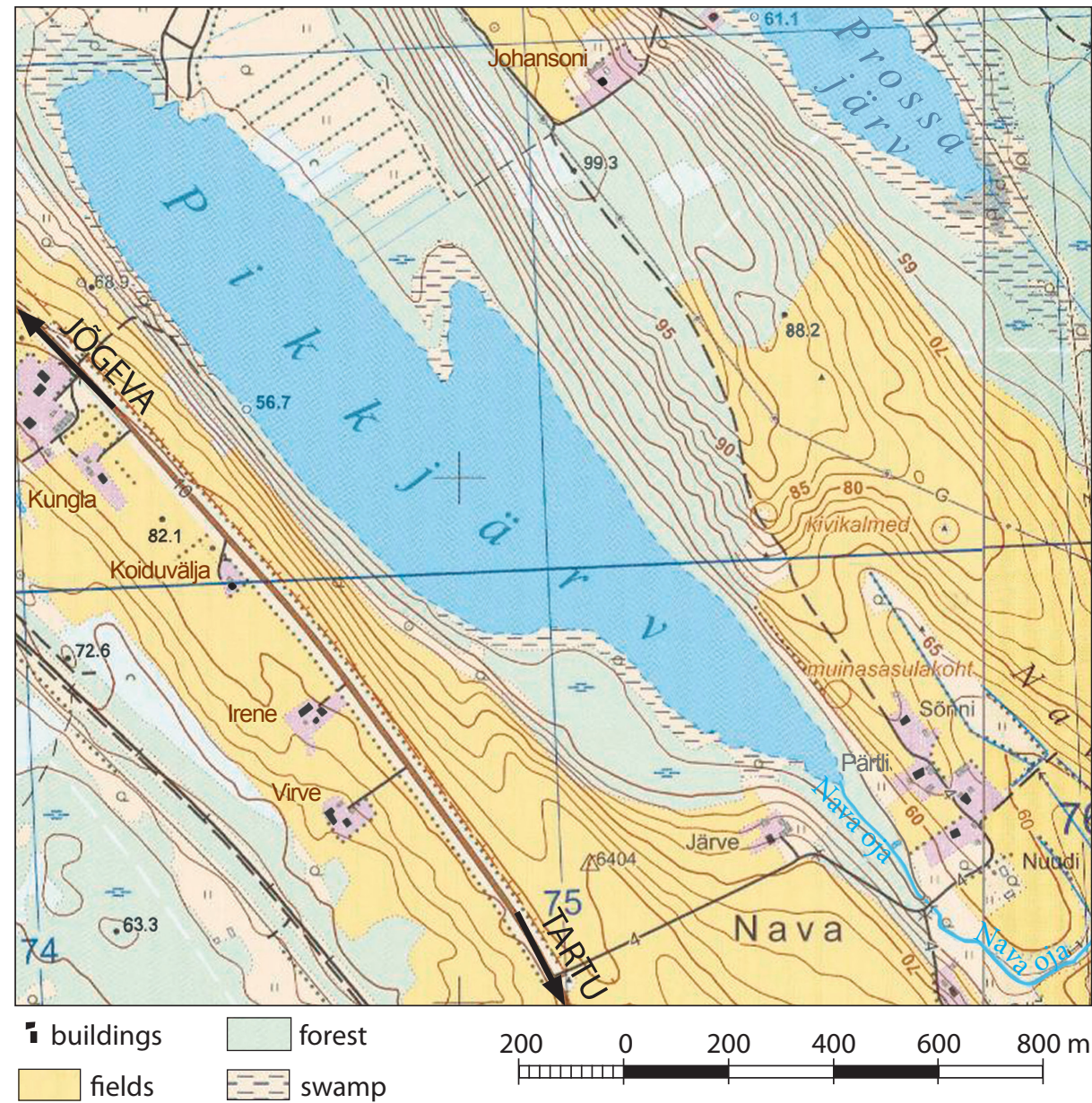
- 1) _____ 2) _____

1 p

25

10. Use info from the map of Lake Pikkjärve area to answer the following questions.

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Which directions has the photo of Lake Pikkjärve been taken? Mark the most correct answer with a **X**.



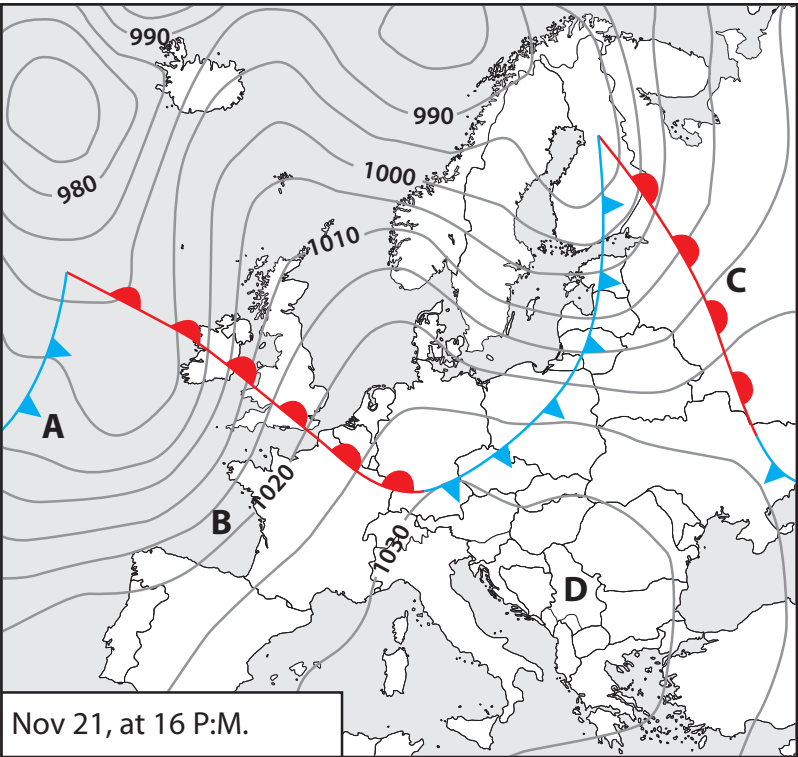
Arne Ader <http://www.loodusemees.ee/index.html>

- A. 26 north
- B. 26 northeast
- C. 26 east
- D. 26 southeast
- E. 26 south
- F. 26 southwest
- G. 26 west
- H. 26 northwest

1 p

18. Places A, B, C and D are marked on weather map of Europe. Weather is described for two of these places. Decide which two have weather like the given description and write the correct letter in the table.

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Weather description	Letter on the map
Cloudy, wet snow and rain	57
Crisp windless weather and cloudless sky	58
What is air pressure in Narva?	
_____ 59 mb	
Use letter K to mark on the map the centre of high pressure region (anticyclone).	
Where in Europe was warm front located in?	

1 p

1 p

1 p

1 p

2 p

19. What is **warm current**? Explain.

Explain the role of warm currents in warmth exchange in different regions of the Earth.

20. Explain thoroughly how such landforms like in the photo have been formed on the coast.



Why do some areas on the coast erode more easily than the others?

1 p

1 p

15. Add the number on the map to a corresponding country.



- Albania _____ 44
- The Netherlands _____ 45
- Luxembourg _____ 46
- Portugal _____ 47
- Switzerland _____ 48
- Hungary _____ 49
- Slovakia _____ 50
- Romania _____ 51
- Belarus _____ 52
- Bulgaria _____ 53

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0,5 p

0,5 p

0,5 p

0,5 p

0,5 p

0,5 p

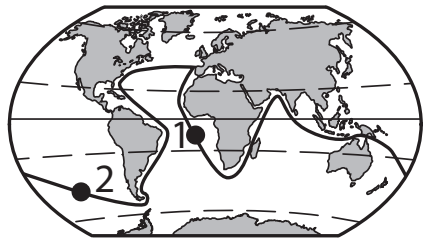
0,5 p

0,5 p

0,5 p

0,5 p

16. A circumnavigation voyage is marked on the map. Which winds dominate in place marked with 1? Mark the most correct answer with an X.



- A. _____ 54 Easterlies
- B. _____ 54 Westerlies
- C. _____ 54 SE Trades
- D. _____ 54 NE Trades

Which winds dominate in place marked with 2 Mark the most correct answer with an X.

- A. _____ 55 Easterlies
- B. _____ 55 Westerlies
- C. _____ 55 Trade winds
- D. _____ 55 Monsoons

17. When is the Sun at its zenith on the Equator? Mark the most correct answer with an X.

- A. _____ 56 At 12 o'clock every day the year round
- B. _____ 56 On midday from spring to summer solstice.
- C. _____ 56 At 12 o'clock on summer and winter solstices.
- D. _____ 56 At midday of spring and autumn solstices.
- E. _____ 56 At midday from autumn to winter solstice.

1 p

What is the distance from Pärtli Farm to Tartu-Jõgeva Highway along the road? Mark the most correct answer with a X.

- A. _____ 27 0,5 km
- B. _____ 27 0,8 km
- C. _____ 27 1,2 km
- D. _____ 27 2,2 km

How high above the sea level does the Johanson Farm lie? _____

What is the relative altitude from Lake Pikkjärve to Koiduvälja Farm? _____

Using the map and photo characterise landscape in Lake Pikkjärve area. Pay attention to the following aspects: relief, landforms, their shape and direction; connection between water bodies and flora with landforms.

11. Oil palms are widely cultivated in Indonesia. Oil from their fruit is used to produce fuel for motor vehicles. Forests from extensive areas are burnt down to get plantations big enough for agricultural machinery to work with. About 75% of forests in Indonesia are destroyed or damaged. From all known plants, animals and birds of the world 10-15% live in Indonesia. Indonesia ranks 3rd in the world for emission of CO₂ after China and USA. 20% of emission of greenhouse gases in Indonesia is the result of destruction of forests.



What kind of forests grow in Indonesia? _____

Why has the share of Indonesia in increase of CO₂ in atmosphere increased together with diminishing forest area in this country?

- 1) _____
- 2) _____

What other results to the environment, in addition to emission of greenhouse gases can be caused by extensive oil palm cultivation in Indonesia?

- 1) _____
- 2) _____
- 3) _____

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1 p

1 p

1 p

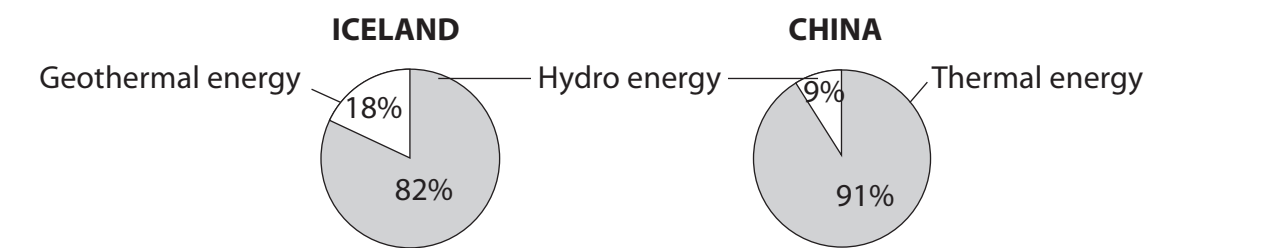
4 p

1 p

2 p

3 p

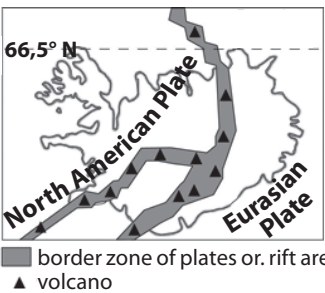
12. Compare possible environmental problems caused by production of electricity in China and Iceland. Prove occurrences of these problems.



1) _____

2) _____

Bring reasons for great role of thermal power plants in electricity production in China.



Explain the connection between the use of geothermal energy and geological construction of Iceland.

13. Give two arguments pro and two contra the statement that it would be rational to increase the use of wind energy in Estonia.

Pro: 1) _____

2) _____

Contra: 1) _____

2) _____

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4 p

34

1 p

35

1 p

36

2 p

37

2 p

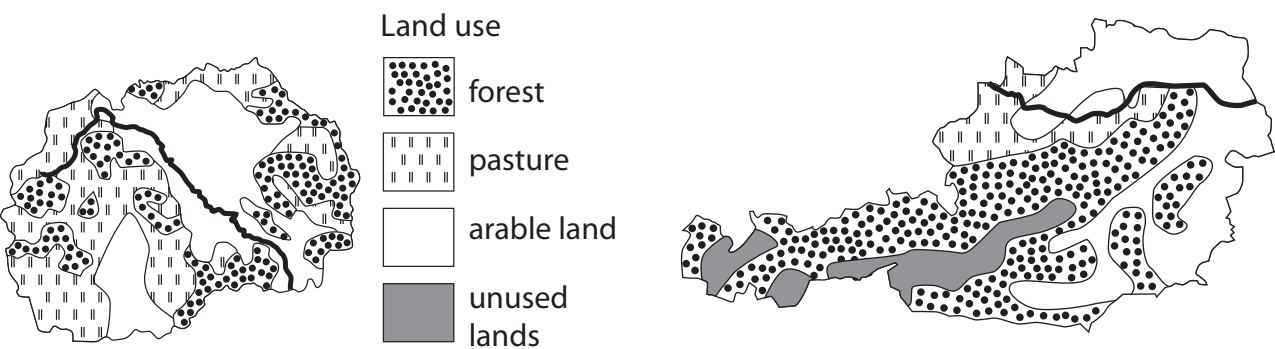
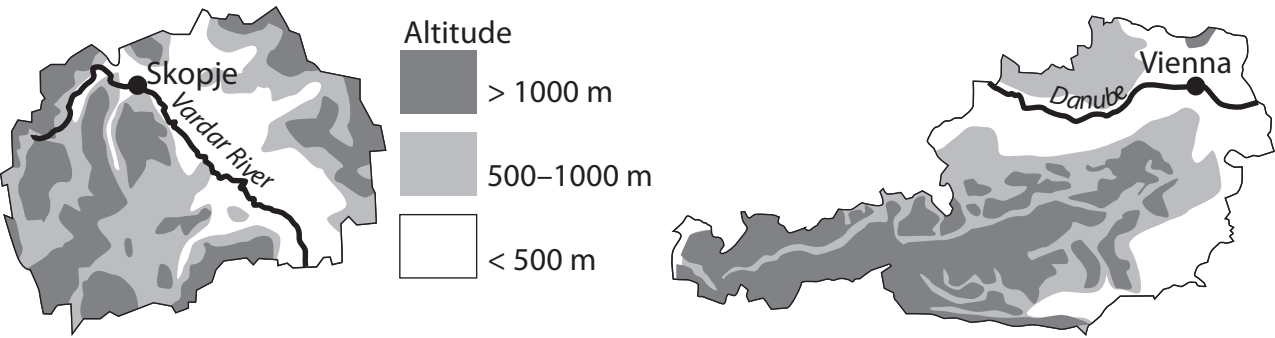
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14. Use information given about Austria and Macedonia to answer the following questions.

	Austria	Macedonia
Share of rural population	32%	40%
Share of forests in total land area	47%	39%
Share of cultivated land in total land area	17%	18%
Occupation in agriculture	3%	20%
Share of agriculture in GDP	1,5%	12%
GDP per capita	41700 USD	10400 USD
Total value of GDP	351th mill USD	21th mill USD
Yields of wheat	50 ts/ha	30 ts/ha
Milk production per cow	6101 kg	2788 kg



Forests are comparatively well preserved in Austria and Macedonia. What natural factor has contributed to this?

Explain distribution of pastures and arable land in Austria and Macedonia.

Pastures: _____

Arable land: _____

Why is wheat productivity and production of milk per cow bigger in Austria than in Macedonia?

Compare importance of agriculture in economies of Austria and Macedonia.

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1 p

39

1 p

40

1 p

41

1 p

42

1 p

43