

2019 United States Geography Olympiad - Written Examination (Middle School)

Student Name _____ School _____

General instructions - Respond to each of examination questions in the space provided. Only answers written in the appropriate space on the answer document will be marked. Where appropriate, you should write sentences or phrases instead of single words. If a question or section asks for a specific number of reasons or answers, give only the number of answers specified. Please write clearly and legibly.

Section 1 - [15 points]

Use the passage below to help answer the following questions.

On at-risk fauna and flora, the study asserts that human activities “threaten more species now than ever before” – a finding based on the fact that around 25 per cent of species in plant and animal groups are vulnerable. This suggests that around one million species “already face extinction, many within decades, unless action is taken to reduce the intensity of drivers of biodiversity loss”. Without such measures there will be a “further acceleration” in the global rate of species extinction, which is already “at least tens to hundreds of times higher, than it has averaged over the past 10 million years”, the report states. It notes that despite many local efforts, including by indigenous peoples and local communities, by 2016, 559 of the 6,190 domesticated breeds of mammals used for food and agriculture were extinct – around nine per cent of the total - and at least 1,000 more are threatened.

- excerpt from the United Nations Global Assessment on Biodiversity, May 2019

1. [6 points] Define the terms flora, fauna and biodiversity.

flora _____

fauna _____

biodiversity _____

2. [4 points] The UN lists five main reasons for loss of habitat and biodiversity in the world discussed in this report. Identify four reasons for global loss of habitat and biodiversity.

reason 1 _____

reason 2 _____

reason 3 _____

reason 4 _____

3. [2 points] Name two things the government of the United States might do to slow the loss of biodiversity in America.

4. [3 points] Brazil has lost a large amount of biodiversity in the last 50 years. Explain why this has been a particular problem in Brazil since the 1960s.

Section 2 - [10 points]

Use the picture in section 2 to complete the following.

- [1 point] Based on the diagram, which of the biomes has the lowest temperature? _____
- [1 point] Which of the biomes on this diagram is the world's largest land biome? _____
- [6 points] Which of the biomes on the diagram would be predominant in each of the following locations?

central Alaska	
Adirondack Park, New York	
northern Baja California, Mexico	
Borneo	
Las Vegas, Nevada	
Serengeti National Park, Tanzania	

- [2 points] Briefly explain the relationship between climate and vegetation shown by the diagram.

Section 3 - [10 points]

Use the diagram in section 3 to complete the following.

- [5 points] Answer the following questions by circling T or F for each statement.

Magma is found at D on the diagram.	T	F
Sedimentary rocks are formed at C on the diagram.	T	F
Metamorphic rocks cannot be found on the earth's surface.	T	F
Extrusive igneous rocks are found above the earth's surface.	T	F
The water cycle has no effect on the rock cycle.	T	F

- [1 point] What broad type of igneous rock is found at A on the diagram? _____
- [1 point] What material, found at B on the diagram, cools to form igneous rock? _____
- [2 points] Circle the two types of rock in which diamonds are found – sedimentary igneous metamorphic
- [1 point] What is formed at E on the diagram by weathering or erosion of an outcrop? _____

Section 4 - [15 points]

Use the pictures in section 4 to complete the following.

1. [2 points] Define the term Richter scale. _____

2. [4 points] Based on the information on the chart, in what country did the earthquakes on the graph labeled A-D occur?

A - _____ B - _____ C - _____ D - _____

3. [3 points] Explain why the earthquakes in Haiti, China and Pakistan may have caused more deaths than those in some of the other countries on the list.

4. [6 points] Answer the following questions by circling T or F for each statement.

Stronger earthquakes result in more deaths than weaker ones.	T	F
The earthquake labeled A on the chart was the strongest earthquake.	T	F
New Zealand is less densely populated than Haiti.	T	F
The New Zealand earthquake is the point at the bottom left of the chart.	T	F
Earthquakes do not occur in the United States.	T	F
The earthquake in Turkey caused the least deaths.	T	F

Section 5 - [15 points]

Use the pictures in section 5 to complete the following.

1. [6 points] Which of the countries in the graphs (A, B or C) has each of the following characteristics -

The highest population growth rate _____ The highest life expectancy _____

A shrinking population _____ Approximately 3% of its population between 70-79 years old _____

A population growth rate of about 1.1% _____ The lowest life expectancy _____

2. [6 points] Answer the following questions by circling T or F for each statement.

The United States is the country in graph A.	T	F
China is not depicted by any of these graphs.	T	F
Country B may be experiencing an increase in marriage age.	T	F
Country A has more men than women.	T	F
Mexico is the country in graph C.	T	F
Country A has a median age just over 18 years old.	T	F

3. [3 points] Which of the following are likely characteristics of the country in graph B? (circle the three answers that apply)

high median income	low number of women in the workforce	high access to healthcare	large urban population	large agriculture sector
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