

2021 United States Geography Championships - Written Examination

Section 1 [25 marks]

Please refer to the information in Section 1 of the Resource Booklet. This information is all about a certain nation.

1. What country does this data represent? [3 marks]

Given the available information, answer the following questions [1 mark per question] –

2. Which of the following best characterizes this country's total fertility rate as of 2019? (6 or above, between 5 and 5.9, between 4 and 4.9, between 3 and 3.9)

3. Which of the following best characterizes the average life expectancy in this country? (just under 45 years, between 50 and 55 years, just under 60 years, over 65 years)

4. Which of the following best characterizes this country's current per capita GNI? (\$400, \$500, \$600, \$700, \$800)

5. In which stage of Rostow's stages of economic growth is this country? (traditional, preconditions for take-off, take-off, drive to maturity, high mass-consumption)

6. Which of these best describes this country's HDI score as of 2020? (below .4, between .5 and .549, between .6 and .649, above .7)

7. In which stage of the demographic transition model is this country? (1, 2, 3, 4, 5)

8. Using specific evidence from the documents provided, explain why you placed this nation in that particular stage of the demographic transition model. [3 marks]

9. Define the term Gender Inequality Index. What three factors are considered when calculating this measure? [4 marks]

10. Would this country have a high or low level of gender inequality? Explain your answer using evidence from the documents. [3 marks]

11. What are some specific policies the government of this country might enact to alleviate the problem of gender inequality? What are some specific steps that might be undertaken by corporations, private charities, or NGOs to achieve this goal? [6 marks]

Section 2 [25 marks]

Please refer to the image in Section 2 of the Resource Booklet.

12. Define the term karst. [2 marks]

13. Which of these are karstic regions? Select all that apply. (Nullarbor Plain, Australia; Tham Luang Nang Non, Thailand; Stone Forest, China; Ha Long Bay, Vietnam; Texas Hill Country, United States; Yosemite Valley, United States; Novosibirsk, Russia; Davis Highlands, Canada; Patagonia, Argentina) [5 marks]

14. Match each of the following landforms and features to the corresponding number on the diagram. (disappearing stream, cavern, karst tower, polje, karst cone, limestone pavement, uvala, resurgent stream, doline) [9 marks]

15. Briefly explain the connection between karst topography and petroleum geology. [2 marks]

16. Briefly explain one difficulty farmers might encounter in karst areas. [2 mark]

17. Briefly explain how karst topography might affect water supplies in wells and aquifers. [2 marks]

18. Define the term uvala. [3 marks]

Section 3 [25 marks]

19. In a well-developed paragraph and with as much detail as possible, explain the impact of railroad expansion on the economy of the United States in the period from 1870 to 1920. [12 marks]

20. In a well-developed paragraph and with as much detail as possible, explain the impact of highway construction on the economy of the United States in the period from 1950 to present. [13 marks]

Section 4 [25 marks]

Please refer to the image in section 4 of the Resource Booklet.

21. Define the term P-wave. [2 marks]

22. Define the term S-wave. [2 marks]

23. Identify 3 main differences between P-waves and S-waves. [3 marks]

24. Define the term surface wave. [2 marks]

25. Briefly identify the main differences between surface waves and body waves. [2 marks]

26. Given the information in the map of the 2016 Ecuador earthquake, briefly explain the cause of this event, including the plates involved and type of earthquake that would occur at this boundary. Be as specific as possible. [7 marks]

27. What is the seismic intensity scale generally used in the United States to measure earthquakes? [1 mark]

28. What is the seismic magnitude scale used to measure earthquakes in the United States? [1 mark]

29. Based on that scale, how intense was the 2016 Ecuador earthquake at its strongest? [1 mark]

30. What was the corresponding magnitude of the 2016 Ecuador earthquake at its strongest? [1 mark]

31. What are three ways the Ecuadorian government could seek to mitigate damage from future major earthquakes? [3 marks]