

2018 United States Geography Olympiad - Map Examination Question Packet

General instructions -

Respond to each of the following questions on the answer document 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 required number of answers specified. The examination consists of eight sections, and each section will be worth the specified number of marks. You have one hour to complete this section of the examination and the accompanying multiple choice questions.

Section 1 [11 marks]

Please refer to the map in Section 1 of the Resource Booklet.

1. What languages are represented by areas 1 and 3 on this map? Identify the reason for the light brown areas labeled 2 on the map. Why are these areas likely located in the areas in the parts of the country that they are?
2. Identify and explain three ways in which countries like Canada promote bilingualism through public policies at the national level.
3. Give one reason for the high level of bilingualism or multilingualism in each of the following countries or areas – a) Hong Kong; b) Indonesia; c) Kazakhstan; d) Kenya

Section 2 [12 marks]

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

1. Given the locations of these coffee producing nations, briefly describe the optimal climate for coffee growing. Identify and describe two likely effects of global warming on coffee cultivation in these areas.
2. Identify and explain one positive impact and two negative impacts of coffee production on coffee producing nations.
3. Is most coffee in the world grown on small farms or plantations? Identify two factors that might account for this method of production.
4. In developed nations, coffee shops are often indicators of changes in urban environments. Identify and briefly explain the connection between coffee shops and – a) gentrification; b) the emergence of the 'gig economy'.

Section 3 [13 marks]

Please refer to the maps in Section 3 of the Resource Booklet.

1. Identify the ocean currents on Map 1 marked 1, 2, 3, and 4.
2. Given the information in Map 1, describe in detail the formation of the Great Pacific Garbage Patch. Include in your response why the Patch is roughly divided into an Eastern and Western Patch, and how trash moves between the two sides.
3. From what part of the world does most of the trash in the Great Pacific Garbage Patch come? Based on the current flow, in what part of the Patch does much of that waste end up?
4. Based on the information in Map 2, which of the following most closely approximates the size of the most concentrated area of the Eastern Pacific Garbage Patch (outlined in bold) - 100,000 square kilometers; 700,000 square kilometers; 1,500,000 square kilometers; or 15,000,000 square kilometers

Section 4 [13 marks]

Please refer to the map in Section 4 of the Resource Booklet.

1. Zebra mussels are an invasive species in the United States, first discovered in the Great Lakes in 1988. How do scientists believe these mussels likely made it to US waters?
2. Identify and explain two reasons why the zebra mussel infestation is concentrated in the areas of the Eastern United States shown on the map.
3. Identify and explain two human-influenced ways and two natural ways that zebra mussels can be spread to isolated waterways and lakes.
4. Briefly describe the effect of zebra mussel infestation on native mussels.
5. Choose one of the other invasive species listed below, and describe – a) what the species is; b) one specific area in the US affected by its invasion; c) one major effect of this species on that area.
Kudzu Nutria Boll weevil Sea lamprey

Section 5 [13 marks]

Please refer to the maps in Section 5 of the Resource Booklet.

1. Given the information in Map 1, briefly explain the high level of seismic risk in the area marked 1.
2. Briefly explain why shale deposits contain oil and gas.
3. Explain the mechanism by which the oil and gas is extracted from shale deposits.
4. What connection is there, if any, between shale gas and oil extraction and the increased seismic risk in the area on Map 1 marked 2?
5. Identify one potential positive economic impact and one potential negative economic impact of shale gas and oil extraction on the area of the Bakken formation in the US. Identify one demographic change in the region due to the boom in production, and one negative impact of that change.

Section 6 [8 marks]

Please refer to the map in Section 6 of the Resource Booklet.

1. Which letter on the map indicates the location of a fjord? Briefly describe the process by which fjords are formed.
2. Briefly explain why fjords like Saltstraumen and many others have very strong saltwater rapids and tidal currents.
3. Define the term skerry. Which letter on the map indicates the location of skerries?