2022

AP® Human Geography

Scoring Guidelines
Set 1

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Question 1: No Stimuli — 7 points

(A) Describe ONE way that labor costs influence the location of food processing facilities in more developed countries. **1 point**

Accept one of the following:

- A1. Food processing companies may locate in places (e.g., rural areas, small towns, small cities, areas of high unemployment, areas without unions) where labor costs are lower.
- A2. Food processing companies may prefer not to locate in places where labor costs are higher (e.g., urban areas, areas with higher payroll taxes, areas with strong union presence).
- A3. Food processing facilities may locate in places where they have access to workers who may be paid below market rates, at minimum wage, and/or with few benefits (e.g., migrant labor, female labor).

(B) Describe ONE way that the development of large-scale commercial agriculture has affected the use of agricultural technology in the United States and Canada. **1 point**

Accept one of the following:

- B1. The development of large-scale commercial agriculture has led to size and/or cost increases in machinery (e.g., irrigation systems, tractors, combines).
- B2. The development of large-scale commercial agriculture has driven efficiency increases in farm management and production with agricultural software (e.g., GPS systems or drones in precision agriculture, software for feed processing).
- B3. The development of large-scale commercial agriculture has led to increasing use of biotechnology, such as genetic modification of crops and animals for diverse purposes (e.g., to increase yields, to improve pest resistance, to change taste and/or appearance).
- B4. The development of large-scale commercial agriculture has led to increases in efficiency of farm management and production systems (e.g., in nutrition, feeding, pesticides, environmental management, control of pollution).

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(C) Explain how the development of large-scale commercial agriculture has led to the agglomeration of food processing facilities in towns and rural areas of the United States and Canada. **1 point**

Accept one of the following:

- C1. Food processing facilities that process grains, vegetables, and/or meat into food and/or fuel agglomerate in rural areas or towns in grain-growing areas to reduce costs associated with transportation, to take advantage of shared infrastructure, and/or to draw from a lower-paid labor pool than in urban areas.
- C2. Food-processing facilities that process perishable products (e.g., dairy, fruit) tend to locate in rural areas or towns in close proximity to urban areas to be close to consumers and/or limit food spoilage.

(D) Explain a strength of using the concept of complex commodity chains to understand the production and consumption of ONE of the following: **1 point**

- orange juice
- hamburger

Accept one of the following:

- D1. Complex commodity chain analysis helps to understand the entire process of orange farming, harvesting, processing, packaging, shipping, and/or distribution of orange juice, or the husbandry, raising, feed production, transportation, slaughter, processing, packaging, and/or distribution of hamburger and/or beef.
- D2. Complex commodity chain analysis helps producers maximize their profits by understanding costs and profits associated with processing, distribution, marketing, and/or retailing leading to the consumption of orange juice or hamburger.
- D3. Complex commodity chain analysis helps distributors maximize profits by understanding costs and benefits associated with the entire commodity chain of orange juice or hamburger from production to consumption.
- D4. Complex commodity chain analysis helps marketers better promote orange juice or hamburgers to national or regional consumers based on understanding the entire production to consumption process, from grower to consumer.
- D5. Complex commodity chain analysis helps elucidate the entire process of production and consumption of orange juice or hamburger and all the related social and environmental costs and/or effects; this, in turn, may help effect change in the commodity chain to promote sustainability.

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(E) Explain ONE way that government policies banning genetically modified organisms may favor small family farms over large-scale commercial agriculture. **1 point**

Accept one of the following:

- E1. If large-scale commercial agriculture firms cannot use GMO technology to reduce costs, the products of small family farms may become more competitive in price with the products of large-scale commercial agriculture.
- E2. Small family farms may be favored over large-scale commercial agriculture in the production of non-genetically modified agriculture (e.g., organic agriculture), high value-added agriculture (e.g., specialty products), regional foods (e.g., foods with appellations like Parmigiano-Reggiano cheese, Jamon Ibérico), and/or heirloom varieties as many small family farms may already be engaged in this form of production.
- E3. These policies may reduce large-scale commercial agricultural firms' control over seed stock, allowing small family farms to diversify their products and better compete with large-scale commercial agriculture.
- E4. Ensuring non-GMO crops are healthy can be a more time-consuming process, which would not accommodate the economies of scale in large commercial farms and would favor the smaller family farms.

(F) Explain why farms in countries such as Italy, France, Spain, or Portugal often require seasonal agricultural workers from other countries. **1 point**

Accept one of the following:

- F1. When these populations went through the demographic transition, their dependency ratio changed and the relative size of the workforce decreased, resulting in a shortage of workers willing to do seasonal agricultural labor that is both strenuous and low paying.
- F2. These countries have small family farm operations dependent upon a large temporary workforce at certain times in the agricultural calendar (e.g., harvests, planting, pruning) to fulfill the need for additional labor.
- F3. Many crops grown in Mediterranean areas (e.g., olives, grapes, vegetables) are tended and picked by hand and thus require a large labor force; growers keep costs down by importing low-paid workers; the cultivation of many Mediterranean crops requires more labor.
- F4. The majority of the workforce in these countries is employed in the secondary and tertiary sectors of the economy, resulting in a shortage of workers willing to do seasonal agricultural labor.

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(G) Explain the degree to which migration or border policies in the European Union affect the movement of agricultural laborers among its member countries **1 point**

Accept one of the following:

Statement or indication of a low degree

AND

Supported by one of the following:

- G1. EU open border policies (e.g., article 45 of the Treaty on the Functioning of the European Union, Maastricht Treaty, Schengen Agreement) allow both internal and immigrant workers from one EU country to move among EU member countries.
- G2. Illegal exploitation of farm workers (e.g., the *caporalato* system in Italy) includes trafficking of laborers or the restriction of free movement across borders.

OR

Statement or indication of a moderate or high degree

AND

Supported by one of the following:

- G3. EU open border policies encourage free movements among EU member countries without immigration controls or visa restrictions at most land border crossings.
- G4. EU member states enacted strict measures during the coronavirus pandemic that curtailed or eliminated the movement of agricultural laborers among member countries.
- G5. Periodic influxes of migrants or asylum seekers may cause some member states to temporarily close borders or increase border controls (e.g., police, immigration, coast guard, and/or customs officers stationed at crossings, military or police patrols of border or coastal areas, installation of fences).

Total for question 1: 7 points

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Question 2: One Stimulus — 7 points

(A) Using numerical data to support your answer, identify the least urbanized country in the table shown. **1 point**

Accept the following:

- A1. Afghanistan's population is the least urban, with 25% urbanized.

(B) Using the data shown in the table, explain ONE difference in urbanization patterns between Australia and Bangladesh. **1 point**

Accept one of the following:

- B1. Australia has a higher percentage of urban population than Bangladesh does, or Australia's percent urban population is more than twice that of Bangladesh.
- B2. Australia's urban population growth rate is lower (e.g., 1% lower) than the urban population growth rate of Bangladesh.
- B3. All of Australia's urban population has access to safe drinking water, while less than half (e.g., 45%) of Bangladesh's urban residents do.
- B4. All of Australia's urban population has access to electricity, whereas Bangladesh has a slightly lower percentage (e.g., 94%) with access to electricity, or 6% of the urban Bangladeshi population is without electricity.
- B5. While there are no squatter settlements in Australian urban areas, more than half (e.g., 55%) of Bangladesh's urban residents live in squatter settlements.

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(C) Describe ONE common characteristic of the built environment of squatter settlements in developing countries. **1 point**

Accept one of the following:

- C1. Squatter settlements are often self-constructed using whatever materials are available to residents at low or no cost (e.g., scrap metal, lumber, cardboard, woven straw mats, tarps, bricks, cinderblocks, tents).
- C2. Squatter settlements typically lack zoning regulations, so may be constructed haphazardly in an unplanned way.
- C3. Squatter settlements typically have high density compared to housing in rural areas or single-family homes in the urban areas of developing countries.
- C4. Squatter settlements are often constructed in (marginal) locations with unfavorable or precarious physical geographical or environmental characteristics (e.g., hillsides, riverbanks, polluted areas, swampy areas).
- C5. Squatter settlements may lack access to basic infrastructure (e.g., sewers, piped water, electricity lines) and/or may have to pay for the delivery of water or the installation of utilities.
- C6. Squatter settlements often rely on self-constructed infrastructure (e.g., rainwater catchment systems, trash disposal, pit latrines, solar panels on roofs) that is not connected to public infrastructure.
- C7. Squatter settlements typically lack sidewalks and have unpaved streets.
- C8. Squatter settlements typically have informal businesses (e.g., small stores, taxi service, day care, street vendors, private communication**,** and transportation systems).
- C9. Squatter settlements typically contain private homes, small businesses in the informal sector, and buildings that house social services (e.g., community health clinics, community stores, community schools).
- C10. Squatter settlements typically contain both self-constructed or fully constructed homes with more permanent materials (e.g., brick, cement block) inhabited by longer-term residents.

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(D) Explain ONE positive health effect likely to result from improved access to electricity in urban areas. **1 point**

Accept one of the following:

- D1. People can use air conditioners and/or electric fans and/or heaters, thus lessening the risk of heat or cold-related illnesses.
- D2. People have improved access to refrigeration, reducing the risk of foodborne illnesses and/or preserving medicines that may need refrigeration.
- D3. With the ability to use electric cooking stoves and/or electric heaters, people are less exposed to unhealthy, indoor air pollutants from fuels (e.g., wood, kerosene, animal dung) used for cooking or heating.
- D4. There is less risk of personal injury from electric appliances than from kerosene or open fires.
- D5. With access to dependable electricity, healthcare facilities can operate more efficiently (e.g., lifesaving equipment, imaging technology, laser surgery, dialysis).
- D6. People have better access to hot water for sanitizing (e.g., hand washing, sanitizing equipment, disinfecting).
- D7. People can use electronic appliances (e.g., laptops, smartphones) to access the Internet and research health issues or solutions that make them more knowledgeable.
- D8. Home medical care can become more efficient with access to electricity (e.g., respiratory therapy, dialysis, motorized lift beds, chairs, and wheelchairs).
- D9. Street lighting may lessen the risk of personal injury (e.g., pedestrians crossing the street).

(E) Explain ONE reason why individuals in less developed countries are likely to move to cities, contributing to the global trend of rural to urban migration **1 point**

Accept one of the following:

- E1. People may move to cities to find work (e.g., better and/or higher-paying work).
- E2. People move to cities because there may be insufficient economic opportunities in rural areas due to job loss (e.g., mechanization and agribusiness), and/or increasing cost of land (e.g., rents, taxes).
- E3. People may move to cities for educational opportunities.
- E4. People may move to cities to access better services and/or infrastructure (e.g., health care, housing, clean water, electricity).
- E5. People may move to cities because of enhanced social and cultural opportunities.
- E6. People may have lost their homes in rural areas due to disasters (e.g., floods, droughts, war) and/or environmental degradation (e.g., soil erosion, water resource depletion).
- E7. People may have lost their homes in rural areas due to infrastructure projects (e.g., dams, canals, roads).
- E8. People may move to cities to join family members who live there.

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(F) Explain ONE likely effect of rural to urban migration on the economy of a developing country. **1 point**

Accept one of the following:

- F1. As the urban labor force grows due to rural to urban migration, urban-based manufacturing (e.g., secondary) and service (e.g., tertiary) sectors may expand.
- F2. Urban standards of living tend to be higher than rural standards of living, creating uneven development within the country.
- F3. Rural areas and/or primary sector activities may be neglected as governments, and private businesses focus investments in urban areas.
- F4. Rural economies may benefit from money that people who have moved to cities send back to their relatives in rural areas.
- F5. As migrants move to cities, higher wages may generate disposable income that stimulates further economic growth (e.g., the multiplier effect) and/or the creation of additional employment opportunities.
- F6. Agglomeration economies and/or agglomeration economies of scale may spur economic growth in a developing country due to lower production costs and higher productivity.

(G) Explain a limitation of the data shown in the table in illustrating challenges to urban sustainability. **1 point**

Accept one of the following:

- G1. There are no data on environmental components of sustainability over time (e.g., air quality, sprawl, greenhouse gas emissions, ecological footprint, waste production and treatment, vulnerability to natural hazards).
- G2. There are insufficient data on economic components of urban sustainability (e.g., the type of energy production and use [non-electric], employment or unemployment, transportation, cost of living, poverty).
- G3. There are insufficient data on social components of urban sustainability (e.g., environmental injustice, demographic characteristics such as age and race, governance, health, education, urban upgrade, or redevelopment programs).
- G4. The data in the table do not provide information on policies, projects or sustainability planning programs.
- G5. Data shown is at a national scale and does not provide for city-specific data nor variability among cities.

Total for question 2: 7 points

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Question 3: Two Stimuli — 7 points

(A) Describe the type of political boundaries shown in Map 1. **1 point**

Accept one of the following:

- A1. Boundaries that are superimposed by an outside power.
- A2. Geometric boundaries that are generally straight lines.
- A3. Physical boundaries that follow landforms and/or waterways.

(B) Describe ONE way that the European colonial boundaries shown in Map 1 differ from the African cultural boundaries shown in Map 2. **1 point**

Accept one of the following:

- B1. Map 2 portrays consequent and/or subsequent boundaries; Map 1 portrays superimposed, geometric, or physical boundaries.
- B2. Map 2 boundaries separate distinct culture groups; Map 1 boundaries largely disregard cultural boundaries.
- B3. Map 2 boundaries enclose areas containing distinct culture groups; Map 1 boundaries often cut across culture group areas.
- B4. Map 2 boundaries represent or reflect the cultural geography of the region; Map 1 boundaries are political and imposed by outsiders (e.g., Berlin Conference), disregarding cultural geography.
- B5. Map 2 boundaries represent the cultural geography of the region; Map 1 boundaries may be influenced by physical geography (e.g., rivers, lakes) or precolonial trade routes.

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(C) Explain ONE political outcome for present-day Africans as a result of the European colonial boundaries. **1 point**

Accept one of the following:

- C1. Some colonial boundaries that were retained after independence contributed to long-term political fragmentation and instability in some countries.
- C2. Some colonial boundaries split culture group areas, weakening the cultures' long-term cohesiveness and impact on the countries in which they are located.
- C3. Some colonial boundaries enclosed historically adversarial culture groups within the same countries, leading to conflict or heightened tension and/or creating centrifugal forces.
- C4. Some colonial boundaries that were retained after independence led to conflict over access to natural resources (e.g., rivers, lakes, forests) when populations that traditionally had access to these resources were cut off from them.
- C5. Some colonial boundaries split up culture groups (e.g., Somali, Ewe, Tuareg) between different countries, resulting in the contesting of current state boundaries as these cultures attempted to reunify.
- C6. Some superimposed boundaries were rarely surveyed on the ground, and many boundaries have still not been demarcated, leading to unresolved border conflicts.
- C7. Some colonial boundaries resulted in multinational states, multistate nations, and/or stateless nations, leading to unresolved border conflicts or internal instability.

(D) Describe ONE way that European colonization of Africa reflected the concept of ethnocentrism. **1 point**

Accept one of the following:

- D1. European colonizers' biased disregard for African culture groups reflected European ethnocentric attitudes (e.g., racism, prejudice, and/or superiority).
- D2. European colonizers tended to claim dominion over African peoples, lands, and resources based upon expansionist European ideologies or through environmental determinism.
- D3. Africans educated in European institutions during colonialism were wrongly taught that their "ancestors" were European (e.g., "Our ancestors the Gauls" in French colonies) in attempts to absorb Africans into the ethnocentric worldview of Europe.

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(E) Explain ONE way that the political boundaries shown in Map 1 illustrate a European colonial emphasis on resource extraction. **1 point**

Accept one of the following:

- E1. The boundaries of some coastal colonies are drawn to provide access to ports or the ocean (e.g., Belgian Congo) while extending boundaries into the continent's interior or to the location of exportable resources.
- E2. The boundaries of some countries (e.g., the Caprivi Strip) were extended to water bodies in the interior of the continent to provide access to lines of transportation or to facilitate transportation of people and/or exportable resources.
- E3. The boundaries of some countries were extended to access resources in interior regions where specific resources (e.g., rubber, timber, gold) or agricultural growing conditions were available (e.g., coffee, cacao).

(F) Explain the degree to which colonization affected the languages spoken in present-day Africa. **1 point**

Accept one of the following:

Statement or indication of a high or substantial degree

AND

Supported by one of the following:

- F1. European languages often became linguae francae or official languages (e.g., for government, business, religion, education) and continue to be spoken widely as second languages.
- F2. European colonial languages have retained their status as first languages among settler colonists in some areas (e.g., English and Afrikaans in South Africa).
- F3. African languages and European languages merged to form creoles that are widely spoken in parts of Africa (e.g., Cabo Verde, Liberia, Sierra Leone).
- F4. Many European loan-words entered African vocabularies as a result of colonization and the widespread usage of European languages (e.g., from Portuguese, English, French, German, Dutch, Spanish).
- F5. Arabic was introduced by Arab colonizers and spread across Africa, where it is widely spoken as a first language.

OR

Statement or indication of a low or minimal degree

AND

Supported by one of the following:

- F6. Most African languages were barely affected by European colonization (despite sometimes being suppressed) and continue to be widely spoken.
- F7. African social and political movements and/or post-independence governments may teach, revive, and/or expand the use of indigenous languages as a part of reclaiming independence or national identity.

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(G) Explain a possible limitation of using Map 2 to understand the geography of religion in present-day Africa. **1 point**

Accept one of the following:

- G1. The map shows culture groups, which are not necessarily synonymous with religions.
- G2. The map only shows West Africa, not Africa as a whole, making it difficult to understand religion at that scale.
- G3. Many culture groups in Africa have populations practicing more than one religion, making it impossible to know which religion is practiced in any given area.
- G4. The map shows only areas where culture groups are dominant, or the map fails to indicate the diversity of religions that may be practiced in those areas.
- G5. The absence of a map legend or key limits interpretation or analysis of the information provided.

Total for question 3: 7 points

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