HUMAN GEOGRAPHY

SECTION II

Time—1 hour and 15 minutes

3 Questions

Directions: You have 1 hour and 15 minutes to answer all three of the following questions. It is recommended that you spend approximately one-third of your time (25 minutes) on each question. It is suggested that you take up to 5 minutes of this time to plan and outline each answer. You may plan your answers in this orange booklet, but no credit will be given for anything written in this booklet. **You will only earn credit for what you write in the separate Free Response booklet.**

Question 1

1. The availability of food in the context of a growing world population is influenced by many social, environmental, and economic factors.

    A. Define the concept of carrying capacity.

    B. Describe ONE way that humans have altered the environmental sustainability of agricultural lands.

    C. Explain how transportation technology has increased economies of scale in the agricultural sector of less developed countries.

    D. Explain a likely negative economic outcome of Green Revolution agricultural practices on rural communities.

    E. Explain ONE weakness of Malthusian theory in predicting the relationship between food production and population growth in contemporary society.

    F. Explain how surplus food production has changed the global market for local agricultural products.

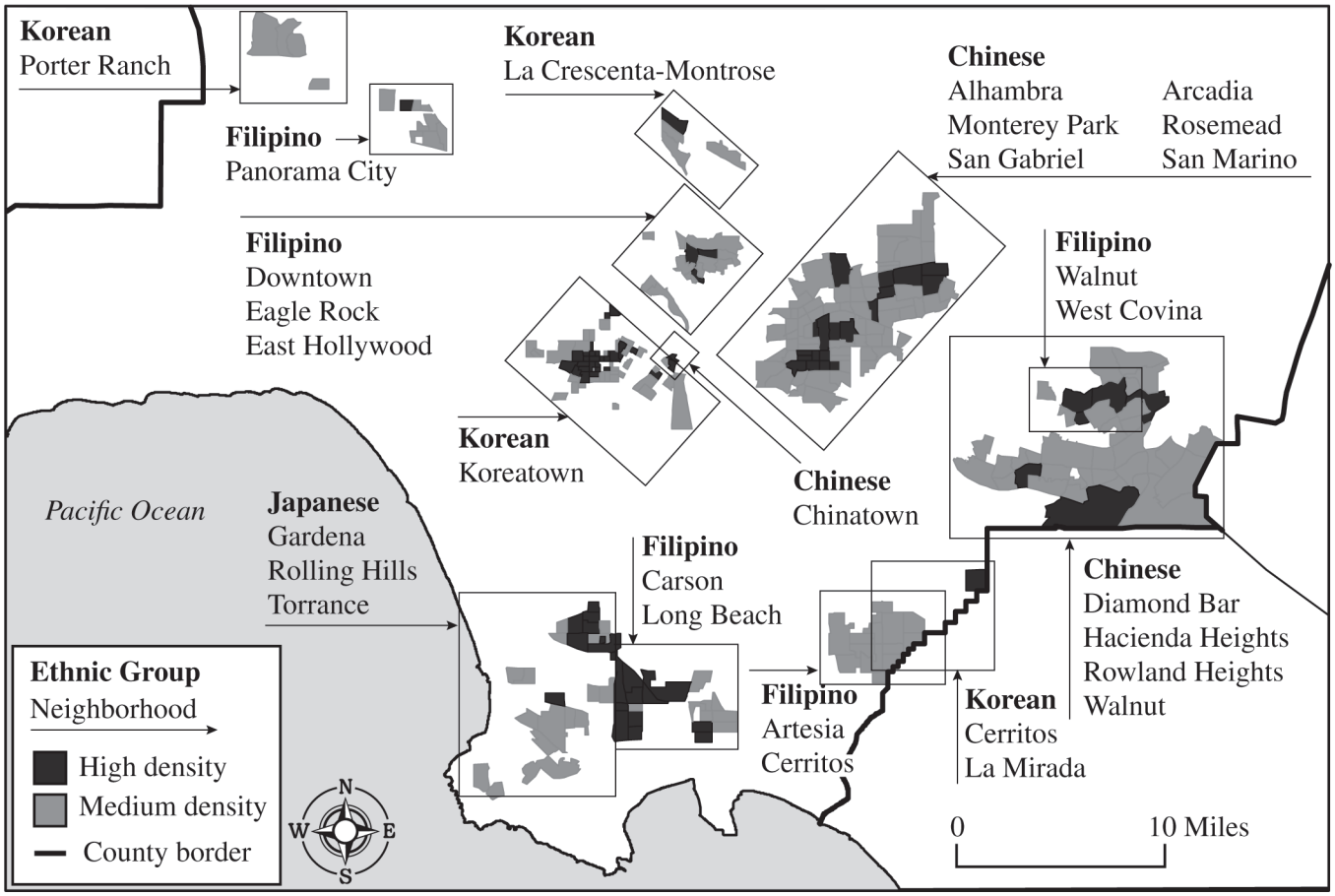
    G. Explain the degree to which Green Revolution agricultural practices were effective in reducing hunger in less developed countries. (Response must indicate the degree [low, moderate, high] and provide an explanation.)

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

GO ON TO THE NEXT PAGE.

Question 2

Selected Asian Ethnic Neighborhoods in Los Angeles County, California



Source: United States Census Bureau

2. The map shows predominantly Asian ethnic neighborhoods in Los Angeles County, California. The names of the neighborhoods and the densities of the ethnic groups are identified on the map.

   A. Identify ONE neighborhood labeled on the map where two or more Asian ethnic groups reside.

   B. Describe the spatial pattern of Chinese ethnic neighborhoods labeled on the map.

   C. Explain ONE way immigrants may choose to assimilate into their new place of residence.

   D. Explain ONE way immigrants may preserve their ethnic traditions in their new place of residence.

   E. Describe ONE way that ethnic neighborhoods may contribute to a sense of place in large metropolitan areas such as Los Angeles.

   F. Explain how the process of redistricting may be used to decrease an ethnic community's political power.

   G. Explain how the process of redistricting may be used to increase an ethnic community's political power.

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Question 1: No Stimulus — 7 points

(A) Define the concept of carrying capacity. — **1 point**

Accept one of the following:

- A1. The number of people a particular place, area, and/or the Earth can support.
- A2. Population size, distribution, and/or density affects how many people the environment and its natural resources can support.
- A3**.** The number of living organisms that an area or habitat can support without environmental degradation.
- A4. Changes in population density and/or population distribution may affect the capacity of the environment to meet the population's needs.

(B) Describe ONE way that humans have altered the environmental sustainability of agricultural lands. — **1 point**

Accept one of the following:

Decreased environmental sustainability

- B1. Overuse or use of synthetic fertilizers, pesticides, and/or herbicides that harm ecosystems (e.g., water, air, soil) and/or increase pollution.
- B2. Overuse or use of resources (e.g., water, air), reducing productivity.
- B3. Overuse, erosion, or nutrient depletion of soil, reducing productivity.
- B4. Overuse of irrigation, depleting water resources, reducing soil nutrients (via runoff), or contributing to soil salinization.
- B5. Agricultural practices (e.g., monocropping, commercial agriculture, increased use of high-yield seeds, GMOs, and/or biotechnology) have reduced biodiversity and/or depleted soil nutrients.

OR

Increased environmental sustainability

- B6. Improved management of farm resources (e.g., water, soil, fertilizers, pesticides) has helped ecosystems.
- B7. Use of organic agricultural practices, including natural fertilizers, pesticides, and/or herbicides.
- B8. Restoration of environmentally damaged areas by implementing sustainable agricultural practices.
- B9. Crop rotation which supports soil health (fertility) and/or avoids large-scale environmental damage.
- B10. Decreased irrigation and/or extraction of water from aquifers or groundwater resources.
- B11. Conservation of farmland (e.g., fallowing, erosion control) and/or local resources (e.g., water supplies, native species).

(G) **Explain the degree to which Green Revolution agricultural practices were effective in reducing hunger in less developed countries. (Response must indicate the degree [low, moderate, high] and provide an explanation.)** **1 point**

Statement of a moderate or high degree

AND

Supported by one of the following:

- G1. Food production increased due to high-yield seeds, chemical fertilizers, pesticides, irrigation, and/or mechanization.
- G2. Crop surpluses reduced food prices, making food items more accessible and/or more affordable.
- G3. More agricultural land came under cultivation, increasing food production.

OR

Statement of a moderate or low degree

AND

Supported by one of the following:

- G4. Green Revolution inputs (e.g., fertilizers, pesticides, high-yield seeds, irrigation, mechanization) were too expensive for many farmers, resulting in fewer farms and/or lower agricultural yields.
- G5. Irrigation systems led to the salinization of the soil, reducing food production.
- G6. The inputs (e.g., chemicals, fossil fuels) and/or land management techniques resulted in environmental degradation and/or abandonment of productive land, decreasing food production.

Total for question 1: 7 points