AP Human Geography Unit V. Agricultural and Rural Land Use

Free Response Questions

- **FRQ 1** The main division within agriculture exists between subsistence and commercial methods of production.
 - A) Define subsistence and commercial agriculture.
 - B) Describe the world wide geographic distribution for subsistence and commercial agriculture today.
 - C) Discuss in detail the striking difference between subsistence and commercial agriculture for the following categories: farm size, use of machinery, purpose of farming, percentage of farmers in the labor force, and relationship to other businesses.

FRQ 1 Scoring guideline/rubric - 16 points.

- A) 2 points 1 point for the correct definition of subsistence agriculture. 1 point for the correct definition of commercial agriculture.
- B) 4 points 2 points for accurately describing the geographic distribution of commercial agriculture. 2 points for accurately describing the geographic distribution of subsistence agriculture.
- C) 10 points (2 points for each category)

This question determines if students understand the two basic categories within agriculture (subsistence & commercial), the distribution for each basic category ((Least Developed Countries (LDCs) vs. More Developed Countries (MDCs)), and to elaborate in detail on the five different categories that separate subsistence from commercial agriculture.

- **FRQ 2** The von Thunen model of rural land use is often used to analyze the distribution of different types of agriculture activities across the landscape.
 - A) Describe the basic geographic principles of the model.
 - B) How would the categories listed below alter the distribution of agricultural activities according to the von Thunen model?
 - i) topographic features/physical geography
 - ii) modern forms of transportation (rail, truck, ship)
 - iii) climatic and soil variations

C) Apply von Thunen's model to either the United States **or** the continent of Europe, and describe in detail where the single market would be located, and the geographic distribution of dairy, market gardening, mixed crop and livestock, corn and soybeans, wheat, and animal grazing practices.

FRQ 2 Scoring guideline/rubric – 22 points.

- A) 6 points 2 points for a thorough discussion of the role that land costs (distance from the market) plays in the distribution of agricultural practices. 2 points for a thorough discussion of the role that transportation costs play in the distribution of agricultural practices. 2 points for a thorough discussion regarding the interplay between distance from market and cost of transportation.
- B) 6 points (2 points for each category) For each category the student needs to explain how the distribution would alter the concentric rings and give a specific example if possible.
- C) 12 points 2 points for correctly identifying New York or London/Paris as the single market. 2 points for identifying the correct distribution for each agricultural practice (1pt.) with a short explanation (1pt.) for the geographic rationale.

This question asks students to explain the basic geographic principles of the von Thunen model (distance from market vs. cost of transportation). Part B determines if students understand the assumptions in the model and that in reality concentric rings of land use is rare. Part C gives students the opportunity to apply the model in general terms to reality, and explain the justification for their geographic choices.

FRQ 3 For the second agricultural revolution answer the following questions in detail.

- A) Where did the second agricultural revolution begin and why?
- B) Discuss how the four-field system and two technological innovations contributed to increased agricultural productivity.
- C) Discuss in detail how the second agricultural revolution influenced population distribution in Europe and North America.

FRQ 3 Scoring guideline/rubric – 12 points.

A) 2 points - 1 point for correctly identify that that the second agricultural revolution started in England. 1 point for explaining why the hearth took place in England (Industrial Revolution and the Enclosure Movement).

- B) 6 points 2 points for identifying two inventions that led to increased agricultural productivity. 2 points for explaining how each invention increased agricultural productivity
- C) 4 points 4 points to adequately discuss how increased agricultural production helped support the growing urban population during the Industrial Revolution.

This question is historically based, however it is important for students to understand the connection between the Industrial Revolution, population growth, and the second agricultural revolution. Also, the four-field system has been revisited using sustainable and organic agricultural practices.

- **FRQ 4** Globalization is changing the geography of agriculture. For any **three** of the categories listed below, describe in detail how globalization is altering the geography between areas of production and consumption. Please give specific examples.
 - A) the changing geography of apples or kiwis
 - B) improvements in transportation (containerization)
 - C) impact of trade agreements (NAFTA or EU)
 - D) growth of transnational corporations

FRQ 4 Scoring guideline/rubric – 12 points.

12 points – four points for each category discussed. - 1 point for identification of the situation. 2 points for explaining in detail the changing geography under consideration. 1 point for examining the significance from a geographic perspective.

Part A is meant to help students identify the role that comparative advantage plays with respect to the changing geography of agricultural production areas. For example, apples can now be grown cheaper in China than in Washington State.

Part B deals with the fact that containerization is making areas in the southern hemisphere (e.g., Chile) more competitive as major producers of agricultural products during the winter in the northern hemisphere.

Part C deals with two case studies of how NAFTA has impacted farmers in Mexico, and how the EU refuses Genetically Modified Organism (GMO) corn and other crops from the United States.

For D students need to discuss how a transnational corporation is impacting areas of production. Coffee, tea, pineapples, and bananas are great examples.

FRQ 5 Many developing countries are faced with rapidly expanding populations, which puts a strain on their agricultural production systems. Choose any **three** strategies listed

below and discuss in detail the viability and future prospects of the selected method in increasing food production.

- A) Increase the amount of land in agricultural production in a country in sub-Saharan Africa or Asia.
- B) Increase the productivity of land in South or Southeast Asia.
- C) Increase new food sources for Islamic countries.
- D) Increase new food imports for China or India.

FRQ 5 Scoring guideline/rubric -12 points.

12 points – 4 points per category. 1 point for identifying the strategy. 2 points for analyzing the effectiveness of the strategy. 1 point for discussing the future prospects for the strategy.

This question asks students to identify, analyze the effectiveness, and speculate on the future likelihood of success for three different strategies that countries could use in order to feed their growing populations.

- **FRQ 6** Some agricultural practices in Least Developed Countries (LDCs) include shifting cultivation, pastorial nomadism, and intensive subsistence. For **one** of these categories answer the following questions.
 - A) Define the agricultural practice and describe three characteristics.
 - B) Describe the geographic distribution of the agricultural practice.
 - C) Discuss in detail two future challenges for the agricultural practice.

FRQ 6 Scoring guideline/rubric - 12 points.

- A) 4 points 1 point for an accurate definition. 3 points 1 point for a description of each characteristic
- B) 4 points 3 points for an accurate geographic description for the chosen agricultural practice. 1 point for making a connection between climate region(s) and the geographic distribution.
- C) 4 points 2 points for a thorough description for each future challenge

The purpose of this question is to see how well students understand the basic characteristics, reasons for the geographic distribution, and future challenges for shifting cultivation, pastorial nomadism, and/or intensive subsistence agriculture.

FRQ 7 In the United States the number of family owned farms is decreasing while the average size of farms is increasing. These recent trends make it more difficult for individually owned farming operations to compete against corporate farms. Choose **two** examples below and define the trend, discuss the methods used, motivations for engaging in this trend, and impact on the industrial agriculture and the market. Please give specific examples if possible!

- A) organic agriculture
- B) eating locally (community supported agriculture (CSA) and farmer's markets)
- C) sustainable agriculture
- D) fair trade agriculture

FRQ 7 Scoring guideline/rubric -18 points

- 1 point for the definition of the trend.
- 3 points for describing the methods used for a particular trend.
- 3 points for a thorough examination of the motivation behind the trend (economic and environmental).
- 2 points for understanding the impact that the trend has on the market and industrial agriculture.

This question requires students to understand how theses recent trends came about and the impact that each one is having in shaping the future of agriculture in North America and Europe. Students should recognize that these trends are both an economic and environmental reaction to the industrialization of agriculture. Students should also recognize that organic and sustainable agriculture has been accused of becoming part of the agribusiness complex too.