Assignment 12

Unit 14 - Week 12

Dr. [Last Name]

[Date]

1. What area did the country of Saudi Arabia make a significant contribution to human agriculture? (10 points)
   - Select and explain the four categories of contributions:
     a. Green energy
     b. Agriculture
     c. Infrastructure
     d. Industry

2. What are the current trends in agriculture in the United States? (10 points)
   - Discuss the impact of weather on crop yields.
   - Analyze the role of technology in modern agriculture.
   - Evaluate the impact of globalization on American agriculture.

3. What are the major challenges facing the modern agricultural industry? (10 points)
   - Discuss the importance of sustainable practices.
   - Analyze the role of government subsidies in agriculture.
   - Evaluate the impact of climate change on agricultural productivity.

4. What is the role of biotechnology in modern agriculture? (10 points)
   - Discuss the impact of genetically modified organisms (GMOs) on crop yields.
   - Analyze the role of biotechnology in increasing crop resistance to pests.
   - Evaluate the impact of biotechnology on food safety.

5. What are the implications of biotechnology for future agriculture? (10 points)
   - Discuss the potential impact of biotechnology on food security.
   - Analyze the ethical considerations associated with biotechnology.
   - Evaluate the need for international cooperation in addressing biotechnology issues.

6. What is the role of biotechnology in improving crop yields? (10 points)
   - Discuss the impact of biotechnology on crop resilience to environmental stress factors.
   - Analyze the role of biotechnology in increasing crop productivity.
   - Evaluate the potential impact of biotechnology on reducing the need for chemical fertilizers.

7. What are the potential implications of advancements in biotechnology for future agriculture? (10 points)
   - Discuss the potential impact of biotechnology on the environment.
   - Analyze the role of biotechnology in addressing global food security issues.
   - Evaluate the potential impact of biotechnology on the economy.

8. How does biotechnology contribute to the sustainability of agriculture? (10 points)
   - Discuss the impact of biotechnology on reducing the environmental impact of agricultural practices.
   - Analyze the role of biotechnology in increasing the efficiency of resource use.
   - Evaluate the potential impact of biotechnology on addressing climate change.

9. What is the impact of biotechnology on small-scale farmers? (10 points)
   - Discuss the impact of biotechnology on the ability of small-scale farmers to access markets.
   - Analyze the role of biotechnology in increasing the productivity of small-scale farmers.
   - Evaluate the potential impact of biotechnology on reducing the cost of agricultural inputs.

10. What are the potential ethical considerations associated with biotechnology? (10 points)
    - Discuss the impact of biotechnology on the role of traditional agricultural practices.
    - Analyze the potential impact of biotechnology on the food chain.
    - Evaluate the potential impact of biotechnology on the role of consumers in agricultural decision-making.