Other products that are made from soybeans but do not look like them are more widely accepted in North America. Krill (small crustaceans) could be an important source of food from the oceans, but unfortunately krill does not taste very good.

**Increasing Trade.** The fourth alternative for increasing the world’s food supply is to export more food from countries that produce surpluses. The three top export grains are wheat, maize (corn), and rice. Few countries are major exporters of food, but increased production in the net-exporting countries could cover the gap elsewhere. The United States remains by far the largest grain exporter, accounting for one-half of global corn exports and one-fourth of wheat. Elsewhere in the world the picture has changed in the twenty-first century. From net importers of grain, South Asia and Southeast Asia have now become net exporters.

Japan is by far the world’s leading grain importer, followed by China. On a regional scale, Southwest Asia (with Northern Africa) has become the leading net importer of all three major grains, and Saudi Arabia was the world’s leading importer of rice in 2007. Sub-Saharan Africa also ranks among the leaders in net imports of all three grains.

**Key Terms**
- Agribusiness (p.313)
- Agriculture (p.309)
- Cereal grain (p.323)
- Chaff (p.320)
- Combine (p.326)
- Commercial agriculture (p.311)
- Crop (p.309)
- Crop rotation (p.321)
- Desertification (p.335)
- Double cropping (p.321)
- Grain (p.325)
- Green revolution (p.336)
- Horticulture (p.328)
- Hull (p.320)
- Intensive subsistence agriculture (p.319)
- Milkshed (p.324)
- Paddy (p.320)
- Pastoral nomadism (p.318)
- Pasture (p.319)
- Plantation (p.322)
- Prime agricultural land (p.313)
- Ranching (p.326)
- Reaper (p.326)
- Ridge tillage (p.331)
- Sawah (p.320)
- Shifting cultivation (p.314)
- Slash-and-burn agriculture (p.314)
- Spring wheat (p.325)
- Subsistence agriculture (p.310)
- Sustainable agriculture (p.331)
- Swidden (p.315)
- Thresh (p.320)
- Transhumance (p.319)
- Truck farming (p.328)
- Wet rice (p.319)
- Winnow (p.320)
- Winter wheat (p.325)

**Test Prep Questions**

1) Which of the following was domesticated in the Americas?  
A) rice  
B) millet  
C) corn  
D) wheat
2) What region is thought to have been the hearth of the domestication of the largest number of animals useful for agriculture?
   A) East Asia
   B) Southwest Asia
   C) sub-Saharan Africa
   D) South America

3) Which of the following was NOT domesticated in the Americas?
   A) barley
   B) squash
   C) beans
   D) potatoes

4) Which of the following is NOT one of the principal features that distinguishes commercial agriculture from subsistence agriculture?
   A) use of machinery
   B) purpose of farming
   C) choice of crop
   D) farm size

5) What is another term for “shifting cultivation”?
   A) sustainable agriculture
   B) pastoral nomadism
   C) subsistence agriculture
   D) slash-and-burn agriculture

6) Which of the following statements about pastoral nomadism/pastoral nomads is FALSE?
   A) Today, it is a declining form of agriculture.
   B) They consume mostly grain rather than meat.
   C) They depend upon animals rather than crops for survival.
   D) They raise animals mostly to kill for food.

7) Which of the following is NOT an important plantation crop?
   A) wheat
   B) rubber
   C) sugarcane
   D) coffee

8) What type of agriculture typically involves crop rotation?
   A) grain farming
   B) Mediterranean agriculture
   C) mixed crop and livestock farming
   D) dairy farming

9) What are the two most important crops in Mediterranean agriculture?
   A) citrus and nuts
   B) olives and grapes
   C) soybeans and corn
   D) rice and beans
10) Which of the following is NOT a principal practice that distinguishes sustainable agriculture from conventional agriculture?
A) keeping prices low by reducing costs regardless of environmental impact
B) sensitive land management
C) limited use of chemicals
D) better integration of crops and livestock

**Short Essay**

1) What features distinguish commercial agriculture from subsistence agriculture?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2) Compare and contrast pastoral nomadism with livestock ranching.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3) Identify the three principal practices that distinguish sustainable agriculture from conventional agriculture and explain how they are sustainable.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
MULTIPLE-CHOICE QUESTIONS
UNIT FIVE

1. The production of only enough food to feed the farmer's family with no surpluses to sell is called

   (A) irrigation farming
   (B) truck farming
   (C) seed agriculture
   (D) subsistence agriculture
   (E) shifting agriculture

2. Modern improvements in transportation systems have impacted agriculture significantly by

   (A) allowing almost all land surfaces to be farmed
   (B) expanding the role of agribusiness in producing food
   (C) encouraging more people to farm for a living
   (D) encouraging more people to buy local produce
   (E) promoting more vegetative planting

3. Which of the following types of farming was promoted the most in the United States by the invention and use of refrigerated railroad cars during the 19th century?

   (A) grain farming
   (B) livestock ranching
   (C) dairy farming
   (D) truck farming
   (E) plantation farming

4. In which of the following countries is plantation farming LEAST likely to be practiced?

   (A) Brazil
   (B) Nigeria
   (C) Thailand
   (D) Germany
   (E) India
5. The shaded states on the map above are part of a region known as the world's

(A) milkshed
(B) breadbasket
(C) rice bowl
(D) garden district
(E) truck farming center

6. In comparison to commercial ranchers in the Pampas of South America, North American ranchers are less likely to

(A) raise cattle
(B) raise livestock for export
(C) have large amounts of grazing land
(D) depend on railroads to get their products to market
(E) combine dairy farming with ranching

7. According to Carl Sauer, seed agriculture developed from which three hearths in the Eastern Hemisphere?

(A) Southwest Asia, southern China, and western Europe
(B) Southwest Asia, Sub-Saharan Africa, and eastern Europe
(C) western India, northern China, and Ethiopia
(D) Southeast Asia, southern China, and Japan
(E) western India, central Asia, and Southeast Asia
8. Which of the following is NOT a primary activity?

   (A) agriculture
   (B) fishing
   (C) engineering
   (D) forestry
   (E) mining

9. Which of the following types of farming is most often used to raise wet, or lowland, rice?

   (A) intensive subsistence
   (B) shifting cultivation
   (C) pastoral nomadism
   (D) commercial gardening
   (E) plantation farming

10. Cotton, sugarcane, coffee, rubber, and tobacco are usually grown by the methods of

    (A) truck farming
    (B) Mediterranean agriculture
    (C) intensive subsistence farming
    (D) extensive subsistence farming
    (E) plantation farming

11. Which of the following is an example of extensive subsistence farming?

    (A) pastoral nomadism
    (B) dairy farming
    (C) cattle ranching
    (D) wheat farming
    (E) plantation agriculture

12. According to von Thünen, which of the following type of agricultural activity is most likely to take place in ring 1, the closest ring to the central city?

    (A) wheat farming
    (B) animal grazing
    (C) dairy farming
    (D) forestry
    (E) raising of small animals, such as chickens
(Questions 13 and 14 are based on the following chart):

**The Americas**
- beans, squash,
- tomatoes, sweet potatoes,
- peanuts, chilis,
- chocolate, maize (corn),
- potatoes, avocados,
- pineapple, manioc

**The Eastern Hemisphere**
- wheat, rice, olives, grapes, bananas,
- rice, citrus fruits, melons, figs, sugar,
- coconuts
- horses, cattle, pigs, sheep, goats,
- chickens, rabbits, rats

13. The diffusion of crops, other plants, and animals illustrated on the chart above was called

(A) the Indian Ocean Exchange  
(B) the Socialist Market System  
(C) the Putting Out System  
(D) mercantilism  
(E) the Columbian Exchange

14. The diffusion identified in #13 first began to impact world trade patterns during the

(A) 6th century  
(B) 10th century  
(C) 16th century  
(D) 19th century  
(E) 20th century

15. Which of the following countries has the largest percentage of its labor force engaged in occupations in the primary sector?

(A) China  
(B) Mexico  
(C) Iran  
(D) Nigeria  
(E) Russia

16. An important development that stimulated the growth of the Industrial Revolution was the

(A) Neolithic Revolution  
(B) the Second Agricultural Revolution  
(C) the Third Agricultural Revolution  
(D) the Green Revolution  
(E) industrial agriculture
17. The map above shows major regions of the world where

(A) shifting cultivation is common
(B) vegetative planting first began
(C) seed planting first began
(D) intensive subsistence agriculture is common
(E) livestock ranching is common

18. A nucleated settlement pattern is most commonly associated with

(A) Mediterranean agriculture
(B) plantation farming
(C) shifting cultivation
(D) pastoral nomadism
(E) intensive subsistence farming

19. The wattle construction style for houses is most commonly used in

(A) Africa, Southeast Asia, and the Amazonian River Basin
(B) Africa, the Pampas, and Southwest Asia
(C) southern China, Southeast Asia, and Central America
(D) eastern Europe, northern China, and the Korean Peninsula
(E) the Pampas, northern Africa, and India
20. The practice of primogeniture usually results in land parcels that are

(A) small with scattered ownership
(B) large and tended individually
(C) laid out by the metes and bounds system
(D) accessible to transportation
(E) marked by physical boundaries

21. Modern global agricultural patterns have been most directly influenced by

(A) incursions of hunters and gatherers into agricultural regions
(B) the rise of democratic governments
(C) colonial patterns
(D) supranational organizations
(E) collective or cooperative agriculture

22. The shift of the farm as the center of production to a position as just one step in a multiphase industrial process that begins on the farms and ends on the consumer’s table is called

(A) biotechnology
(B) subsistence agriculture
(C) mercantilism
(D) industrial agriculture
(E) vegetative planting

23. The most important techniques that have shaped the Green Revolution are the use of

(A) new higher-yield seeds and the expanded use of fertilizers
(B) the development of an integrated commodities chain and mechanization of farm equipment
(C) irradiation of food and high-speed railroads
(D) intertillage and extensive use of the land
(E) irrigation and labor specialization

24. All of the following are important environmental problems caused by modern agriculture techniques EXCEPT:

(A) erosion
(B) changes in the organic content of soil
(C) depletion of natural vegetation
(D) a general decrease in land productivity
(E) presence of chemicals in soils and ground water
25. One of the most important factors in the creation of the food supply crisis in Sub-Saharan Africa is

(A) the overuse of biotechnology
(B) excessive specialization of crops
(C) too few people to raise crops
(D) underplanting of crops
(E) desertification

UNIT FIVE FREE-RESPONSE QUESTION

Economic activities range from the simple to the complex and encompass human life from ancient to modern times.

(A) Identify and define the three sectors that organize economic activities.

(B) Explain one way that the percentage of labor force by occupation reflects a country's level of economic development.
Section 2: The Geography of Modern Agriculture

MULTIPLE-CHOICE QUESTIONS

1. The modern global geography of agriculture is determined by
   (A) climate.
   (B) soil.
   (C) cultural traditions.
   (D) All of the above
   (E) Only (A) and (B)

2. According to von Thunen, the regional geography of agriculture is determined by
   (A) land area.
   (B) rent.
   (C) urban marketing.
   (D) availability of material inputs.
   (E) climate.

3. _____ is (are) widespread in semiarid climates throughout the world.
   (A) Ranching
   (B) Tropical plantations
   (C) Dairying
   (D) Slash-and-burn agriculture
   (E) Rice paddies

4. The effects of biotechnology
   (A) are positive because it allows for much greater agricultural yields.
   (B) are negative because its expense limits its availability to all farmers across the globe.
   (C) are unknown because very little research has been conducted on them.
   (D) All of the above
   (E) None of the above

5. Agribusiness has had all of the following effects on agriculture, EXCEPT
   (A) the farm is no longer the center of agricultural activity.
   (B) TNCs often control agricultural activity abroad.
   (C) family farmers, through increasing technology, are producing goods for the global economy.
   (D) agriculture has become a multilevel process of production, processing, marketing, and consumption.
   (E) Some corporations essentially dictate agricultural production in other countries besides their own.
FREE-RESPONSE QUESTION

1. Current agricultural systems differ dramatically from agricultural production just 50 years ago.
   
   (a) What are some of the driving forces behind the world’s current agricultural system?
   (b) What are some benefits and disadvantages of global-scale agricultural production?

Section 3: Agriculture and the Environment

MULTIPLE-CHOICE QUESTIONS

1. In arid climates, like southern California and the Middle East, _______ can cause the soil to become salty and infertile.
   
   (A) erosion
   (B) topsoil loss
   (C) salinization
   (D) saltation
   (E) droughts

2. _______ is a common cause of decreasing farmland in rapidly growing urban areas.
   
   (A) Urban sprawl
   (B) Topsoil loss
   (C) Loss of material inputs
   (D) Industrialization
   (E) Agribusiness

3. DDT is an example of a _______ that has had negative effects all the way through the food chain.
   
   (A) herbicide
   (B) pesticide
   (C) bacteria
   (D) fungicide
   (E) genetically modified organism

4. Soil specialists must work to overcome the negative effects of _______ associated with agricultural production.
   
   (A) fertilization and salinization
   (B) pesticides and fertilization
   (C) salinization and topsoil loss
   (D) topsoil loss and gentrification
   (E) the Green Revolution and agribusiness