

Name:

Date:

Class:

Lesson 6.2: Emerging Agricultural Technology

Know and Understand

Answer the following questions using the information provided in this lesson.

1. *True or False?* Technology is the application of scientific knowledge, tools, or processes for practical purposes and solving problems. (6.2.1)

Answer:

2. *True or False?* In 1833, Illinois blacksmith John Lane mass-produced the moldboard plow. (6.2.2)

Answer:

3. Which of the following best describes a set of technologies that helps agriculturalists gain greater control over the management of their production and harvesting operations? (6.2.3)

- A. Conventional tillage
- B. Precision agriculture
- C. Organic agriculture
- D. Production tillage

Answer:

4. In agriculture, computers mounted on equipment can send and receive data using wireless telecommunications. This is called _____. (6.2.4)

- A. texting
- B. machine transfer
- C. telematics
- D. telephonic transfer

Answer:

5. The process an automated communication system uses to collect data from a remote location and transmit it to receiving equipment is called _____. (6.2.4)
- A. transistor mode
 - B. a satellite dish
 - C. a radiotelephone
 - D. telemetry

Answer:

6. A rancher wants to keep track of the movement of cattle on the ranch, so each animal has been tagged with a(n) _____ tag. (6.2.4)
- A. IED (identification electronics detection)
 - B. RFID (radio frequency ID)
 - C. AID (animal ID)
 - D. ATD (agricultural telemetry detection)

Answer:

7. A grower is considering buying a telemetric system used to locate pest infestations, measure soil moisture and temperature, and monitor weather conditions. What is the name of the system they are purchasing? (6.2.4)
- A. CORS
 - B. MSDS
 - C. USDC
 - D. SMAW

Answer:

8. A biofuel that is the product of the fermentation of sugars derived from plants is _____. (6.2.5)
- A. methanol
 - B. ethanol
 - C. glycol
 - D. phenol

Answer:

9. A biofuel derived from natural gas, coal, plant vegetation, and agricultural crop biomass is _____. (6.2.5)

- A. methanol
- B. ethanol
- C. glycol
- D. starch

Answer:

10. A biofuel derived from vegetable oils and animal fats is known as _____. (6.2.5)

- A. veg-all
- B. animal glycol
- C. biodiesel
- D. natural gas

Answer:

11. OLED lighting is a _____. (6.2.8)

- A. lightweight, cool lighting system that uses organic light-emitting diodes
- B. lighting system that uses oil-based fuel
- C. lightweight lighting system that is used primarily by organic farmers to enhance plant growth
- D. lighting created from organic light-emitting anodes

Answer:

12. A greenhouse manager might consider installing a _____, which is a crop growing system in which plants are grown in nutrient-rich water without the use of soil. (6.2.8)

- A. bare root cropping system
- B. hydroponic system
- C. hydro-solar system
- D. water-cooled system

Answer:

13. What is technology? How is it used in agriculture? (6.2.1)

Answer:

14. What are some uses of GPS in agriculture? (6.2.3)

Answer:

15. What are the advantages of organic farming? (6.2.6)

Answer:

16. What are the advantages and disadvantages of in vitro meat production? (6.2.7)

Answer:

17. What is vertical farming? (6.2.8)

Answer: