

Agricultural Innovations and History

Agriculture · Answer Key · 8 Questions

1. Which ancient civilization is credited with developing the first widespread irrigation systems, crucial for early large-scale farming?

- A) The Romans
- B) The ancient Egyptians
- C) The Mesopotamians**
- D) The ancient Greeks

2. What significant discovery by Gregor Mendel in the 19th century laid the foundation for modern genetics and understanding plant breeding?

- A) The role of photosynthesis
- B) The concept of seed dormancy
- C) The principles of heredity**
- D) The importance of soil pH

3. In traditional farming, what is the primary purpose of crop rotation?

- A) To attract more beneficial insects
- B) To prevent soil erosion
- C) To reduce pest and disease build-up in the soil**
- D) To increase the number of harvests per year

4. What is hydroponics, a modern farming technique, based on?

- A) Growing plants without soil, using mineral nutrient solutions in water**
- B) Growing plants using only sunlight and rainwater
- C) Growing plants indoors under artificial light
- D) Growing plants in nutrient-rich compost

5. Which of these is a symbiotic relationship that benefits many legume crops (like peas and beans) in agriculture?

- A) Rhizobium bacteria fixing nitrogen in root nodules**
- B) Earthworms aerating the soil
- C) Mycorrhizal fungi improving water absorption
- D) Ladybugs preying on aphids

6. The Green Revolution, a period of agricultural advancements in the mid-20th century, was largely driven by the development of what?

- A) New types of farm machinery
- B) High-yield varieties of crops**
- C) Organic farming methods
- D) Improved storage techniques

7. What is the term for the process of selectively breeding plants or animals to improve desirable traits over generations?

- A) Natural Selection
- B) Genetic Engineering
- C) Domestication
- D) Artificial Selection**

8. Which critical soil component is essential for providing nutrients, water retention, and aeration for plant roots?

- A) Gravel
- B) Sand
- C) Clay
- D) Organic Matter (Humus)**