

High School Agriculture Fundamentals

Agriculture · Answer Key · 20 Questions

1. Which process do green plants use to convert sunlight into chemical energy?

- A) Respiration
- B) Photosynthesis**
- C) Transpiration
- D) Fermentation

2. What is the primary purpose of applying nitrogen-based fertilizers to crops?

- A) To kill weeds
- B) To increase soil pH
- C) To promote leafy vegetative growth**
- D) To improve water drainage

3. Which soil type typically has the smallest particle size and high water-holding capacity?

- A) Sand
- B) Silt
- C) Clay**
- D) Loam

4. What is the term for the raising of aquatic animals in controlled environments?

- A) Horticulture
- B) Aquaculture**
- C) Silviculture
- D) Apiculture

5. In livestock production, what is a 'ruminant'?

- A) An animal with a single-chambered stomach
- B) An animal that grazes exclusively on grain
- C) An animal with a multi-compartment stomach**
- D) An animal that does not produce milk

6. What does the term 'fallow' mean in crop rotation?

- A) Harvesting crops early
- B) Leaving land unplanted to recover nutrients**
- C) Adding water to crops
- D) Burning crop stubble

7. Which nutrient is primarily responsible for root development and flower production?

- A) Nitrogen
- B) Phosphorus**
- C) Potassium
- D) Iron

8. What is the main byproduct of the respiration process in plants?

- A) Oxygen
- B) Carbon dioxide**
- C) Nitrogen
- D) Glucose

9. What is 'monoculture' in farming?

- A) Growing many types of plants in one area
- B) The cultivation of a single crop over a large area**
- C) Using only organic fertilizer
- D) Rotating crops every season

10. Which of the following is considered an 'abiotic' factor in an agricultural ecosystem?

- A) Earthworms
- B) Fungi
- C) Temperature**
- D) Bacteria

11. What is the primary function of the xylem in a plant?

- A) To transport water from roots to leaves**
- B) To transport sugars from leaves to roots
- C) To provide mechanical support
- D) To perform photosynthesis

12. What is the definition of 'agronomy'?

- A) The study of animal behavior
- B) The science of soil management and crop production**
- C) The design of farm machinery
- D) The marketing of agricultural goods

13. Which insect is vital for the pollination of many commercial fruit and vegetable crops?

- A) Locust
- B) Honey bee**
- C) Termite
- D) Cockroach

14. What is the main goal of sustainable agriculture?

- A) To maximize profit at any cost
- B) To meet present needs without compromising future resources**
- C) To eliminate the use of all machinery
- D) To rely solely on imported seeds

15. In sheep farming, what is the process of removing wool called?

- A) Shearing**
- B) Drenching
- C) Dipping
- D) Crutching

16. What is 'humus' in the context of soil science?

- A) A type of heavy clay
- B) Decaying organic matter**
- C) A synthetic fertilizer
- D) A toxic soil mineral

17. Which crop is categorized as a legume?

- A) Wheat
- B) Maize
- C) Soybean**
- D) Rice

18. What is the primary cause of soil erosion?

- A) Wind and water**
- B) Planting trees
- C) Adding compost
- D) Crop rotation

19. What does the term 'pH' measure in agricultural soil?

- A) The amount of water
- B) The level of acidity or alkalinity**
- C) The percentage of organic matter
- D) The depth of the topsoil

20. What is 'transpiration' in plants?

A) The release of water vapor through leaves

B) The intake of carbon dioxide

C) The growth of roots

D) The absorption of soil nutrients