

1. How does the topography of a region influence agricultural practices and crop selection?
2. Explain the impact of extreme water events such as droughts, floods, or storms on agricultural production.
3. How does the availability of water resources impact productivity?
4. Which of the following factors is NOT typically associated with fertile soil for agriculture?
 - A. High organic matter content
 - B. Well-drained soil structure
 - C. Low nutrient levels
 - D. Balanced pH levels
5. Which of the following climate conditions is most favorable for the growth of rice crops?
 - A. Cool temperatures with low rainfall
 - B. Warm temperatures with high rainfall
 - C. Hot temperatures with strong winds
 - D. Cold temperatures with moderate rainfall
6. What is the definition of organic matter? Please name four organic substances.
7. If a farmer wants to grow kale and spinach, should he choose a cold region or a tropical region?
8. Suppose a seller wants to sell oats, would he choose a country of origin from Northern Canada (Yukon Territory) or middle America (Illinois)?

Answer keys:

1. The topography of a region influences agricultural practices and crop selection by determining factors such as drainage, slope, and accessibility.
2. Extreme weather events such as droughts, floods, or storms have severe impacts on agricultural production.
 - + Droughts can lead to water shortages, stunted crop growth, and reduced yields.
 - + Floods can cause soil erosion, crop damage, and the spread of diseases.
 - + Storms can devastate entire harvests and destroy infrastructure.
3. The availability of water resources significantly impacts agricultural productivity. Areas with abundant water resources, such as rivers, lakes, or reliable rainfall, can support a wide range of crops and higher yields.
4. C. Low nutrient levels
5. B. Warm temperatures with high rainfall
6. Sugar, starch, cellulose, oil, carbohydrates, proteins, lipids, nucleic acids, hormones, and DNA.
7. Cold regions, Spinach can tolerate cold temperatures. Therefore, it can even be sown at the end of the year. If sown before October, it can still be harvested in the same year. In this way, even in the difficult winter months, spinach can provide a variety of important vitamins and minerals.
8. Middle Americans, northbound Canada is too cold.