

Microeconomics in the Natural World

Microeconomics · Answer Key · 12 Questions

1. In microeconomics, a 'scarce resource' is one with limited availability. Which of these is a naturally scarce resource essential for bee colonies?

- A) Oxygen
- B) Nectar during a drought**
- C) Sunlight
- D) Gravity

2. What is the 'opportunity cost' for a squirrel that chooses to spend time gathering acorns instead of sleeping?

- A) The sleep it gave up**
- B) The number of trees in the forest
- C) The weight of the acorn
- D) The size of the squirrel

3. The concept of 'diminishing marginal utility' suggests that each additional unit of a good provides less satisfaction. Which animal experiences this when it becomes full after eating many berries?

- A) A hungry bear**
- B) A hibernating frog
- C) A newborn bird
- D) A dead coral

4. Natural resources like clean water are often considered 'common-pool resources.' What characterizes these resources?

- A) They are owned by only one animal
- B) They are rivalrous but non-excludable**
- C) They are free to create
- D) They have no value to humans

5. In economics, an 'externality' is a consequence of an activity experienced by unrelated third parties. Which action by a flowering plant provides a positive externality to local insects?

- A) Growing taller
- B) Producing nectar**
- C) Dropping leaves
- D) Changing color

6. What is the 'supply' of a specific fruit in a forest ecosystem based on?

- A) The appetite of the animals
- B) The total amount of fruit produced by the trees**
- C) The color of the fruit
- D) The speed of the wind

7. A 'non-renewable resource' is one that cannot be easily replaced. Which of the following is a non-renewable natural resource?

- A) Solar energy
- B) Wind power
- C) Coal**
- D) Tidal energy

8. What describes the 'demand' for nesting materials by birds during the spring season?

- A) The total number of birds
- B) The availability of sticks
- C) The desire and ability of birds to acquire materials**
- D) The size of the trees

9. 'Specialization' occurs when an individual focuses on one task to increase efficiency. How do leafcutter ants demonstrate this?

- A) They sleep all day
- B) They divide labor between cutting, carrying, and processing leaves**
- C) They only eat meat
- D) They migrate every year

10. In an ecosystem, what is the 'market price' equivalent for a predator-prey relationship in terms of energy?

- A) The calories gained versus energy spent hunting**
- B) The time of day
- C) The location of the hunt
- D) The species of the prey

11. What is the 'equilibrium' in a natural ecosystem regarding predator and prey populations?

- A) When all predators die
- B) When the population sizes remain relatively stable**
- C) When prey numbers go to zero
- D) When the weather stays the same

12. Which of these factors acts as a 'barrier to entry' for a species attempting to colonize a remote, isolated island?

A) Abundant food

B) Lack of predators

C) The vast ocean distance

D) Gentle winds