ALBI-345 - Exam 2

Ocober 27, 2021

Name:

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1. State two ways in which pheromones are being used in modern pest control. (2 points)

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2. What is the difference between pheromones and kairomones? (1 point)

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3. There are many species of flies that mimic bees and wasps. What type of mimicry is this and how does it benefit the flies? (2 points)

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4. Insect camouflage may not work unless an insect behaves appropriately. Explain. (1 point)

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5. Most insect species are referred to as having an "r-selected reproductive strategy". What does this mean? (1 point)

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6. The parameter K in the logistic model, also known as the carrying capacity (pick 1 of the following; 1 point):
   - is the maximum number of individuals that can be sustained by available resources
   - is the total amount of food and other resources available to the population
   - is maximum population growth rate
   - all of the above

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7. What two criteria must be present for an organism to be considered an "invasive species"? (2 points)

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8. Tropical islands are much more susceptible to damage from invasive species than are continents? Give two reasons for this difference in risk. (2 points)

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9. About half of invasive insect species arriving on Guam in recent years belong to one order. What is the name of this order and why is this order such a big problem for Guam's biosecurity? (2points)

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10. Give the scientific names for 3 important invasive insect species on Guam and briefly describe the damage they are causing. (6 points)

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11. Sometimes, after a farmer applies a broad-spectrum insecticide, there is a pest population explosion referred to as "pest resurgence"? Explain what might be happening here. (2 points)

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12. Give a brief definition of integrated pest management (IPM). (2 points)

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13. Which of the following are valid IPM tactics? (make 1 choice; 1 point)
    - pesticide application
    - release of biological control agents
    - sanitation
    - crop rotation
    - all of the above

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14. Insect herbivores are sometimes used as biological control agents in weed management programs. Briefly discuss the risks involved and how these risks can be minimized. (2 points)

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15. Classify each insect specimen to Order. (1 point awarded for each correctly identified)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____