

## Plant Conservation Module Test (90 points)

Name: \_\_\_\_\_

Part I. Flower Parts: Please match the flower part to its description (20 pts.)

- |  |                 |
|--|-----------------|
| _____ 1. Where the pollen is produced                      | A. Ovule or Egg |
| _____ 2. Food for the baby plant                           | B. Ovary        |
| _____ 3. The female part of the flower                     | C. Anther       |
| _____ 4. The male part of the flower                       | D. Endosperm    |
| _____ 5. Becomes a fruit                                   | E. Petal        |
| _____ 6. Attracts pollinators                              | F. Stamen       |
| _____ 7. Where pollen is supposed to land                  | G. Filament     |
| _____ 8. What is transferred by insects during pollination | H. Carpal       |
| _____ 9. What the anther is on                             | I. Stigma       |
| _____ 10. Becomes a seed when fertilized                   | J. Pollen       |

### Part II: Pollination

Please state what you think pollinates the following flowers and why. (20 points: 2 points for each correct pollinator and 3 points for each correct explanation)

1. Flower is red, scentless, bell-like in shape, stamens dangle outside the flower.

Pollinator: \_\_\_\_\_

Why: \_\_\_\_\_

2. No petals, no scent, stamens and carpals dangle in the air

Pollinator: \_\_\_\_\_

Why: \_\_\_\_\_

3. Small, white, sweet scent, nectar kept at the bottom of a narrow spur or tube

Pollinator: \_\_\_\_\_

Why: \_\_\_\_\_

4. Large, white, bowl-shaped, sweet scent, blooms at night at end of high branches

Pollinator: \_\_\_\_\_

Why: \_\_\_\_\_

5. Maroon or brownish in color, foul smell

Pollinator: \_\_\_\_\_

Why: \_\_\_\_\_

### Part III: Seed Dispersal

1. Please name a fruit that is dispersed by the following and explain how each one is dispersed. (20 points: 2 points for each correct fruit and 3 points for each correct explanation)

#### **1. Squirrel**

- Fruit Example: \_\_\_\_\_
- How squirrel disperses the fruit: \_\_\_\_\_

#### **2. Hairy animal like a pet dog**

- Fruit Example: \_\_\_\_\_
- How dog disperses the fruit: \_\_\_\_\_

#### **3. A songbird like a robin**

- Fruit Example: \_\_\_\_\_
- How bird disperses the fruit: \_\_\_\_\_

#### 4. Wind

- Fruit Example: \_\_\_\_\_
- How the fruit is suited to wind dispersal: \_\_\_\_\_

5. Driving to Disney World in Florida, you pass orange groves with fruit hanging from the branches

A. Have the orange trees produced flowers? (3 pts.) Please check one space.

\_\_\_\_\_ Yes    \_\_\_\_\_ No    \_\_\_\_\_ Not enough evidence

B. If they have produced flowers, have they been pollinated? (3 pts.) Please check one space.

\_\_\_\_\_ Yes    \_\_\_\_\_ No    \_\_\_\_\_ Not enough evidence

#### Part IV: Conservation

Please give three reasons why people are concerned about the loss of plant diversity (4 points each)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Please list three ways in which people are reducing plant diversity (4 points each)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

## Plant Conservation Test Answers

### Part I: Flower Parts

Please match the flower part to its description (20 pts.)

- |  |                 |
|--|-----------------|
| ___C___ 1. Where the pollen is produced                      | A. Ovule or Egg |
| ___D___ 2. Food for the baby plant                           | B. Ovary        |
| ___H___ 3. The female part of the flower                     | C. Anther       |
| ___F___ 4. The male part of the flower                       | D. Endosperm    |
| ___B___ 5. Becomes a fruit                                   | E. Petal        |
| ___E___ 6. Attracts pollinators                              | F. Stamen       |
| ___I___ 7. Where pollen is supposed to land                  | G. Filament     |
| ___K___ 8. What is transferred by insects during pollination | H. Carpal       |
| ___G___ 9. What the anther is on                             | I. Stigma       |
| ___A___ 10. Becomes a seed when fertilized                   | J. Pollen       |

### Part II: Pollination

Please state what you think pollinates the following flowers and why (2 points for each correct pollinator and 3 points for each correct explanation.)

1. Flower is red, scentless, bell-like in shape, stamens dangle outside the flower.

Pollinator: Hummingbird

Why: Red, scentless, tubular in shape

2. No petals, no scent, stamens and carpals dangle in the air

Pollinator: Wind

Why: No petals, no scent, dangle in the open

3. Small, white, sweet scent, nectar kept at the bottom of a narrow spur or tube

Pollinator: Moth

Why: White, sweet-scented, spur in back of flower for nectar

4. Large, white, bowl-shaped, sweet scent, blooms at night at end of high branches

Pollinator: Bat

Why: large, white, exposed on ends of branches, found in southwestern United States

5. Maroon or brownish in color, foul smell

Pollinator: Fly or carrion beetle

Why: Maroon or brown in color, foul scent

### Part III: Seed Dispersal

Please describe a fruit that is dispersed by the following and explain how each one is dispersed. (2 points for each correct fruit; 3 points for each correct explanation)

1. Squirrel

- Fruit Example: Any species of nut
- How squirrel disperses the fruit: Buries the nut and does not retrieve it

2. Hairy animal like a pet dog

- Fruit Example: Burdock or cocklebur
- How dog disperses the fruit: Fruit sticks to fur

3. A songbird like a robin

- Fruit Example: Berry
- How bird disperses the fruit: Eats fruit, disperses seeds in its wastes

4. Wind

- Fruit Example: dandelion, milkweed, “helicopters” of maple, ash, elm, etc.
  - How the fruit is suited to wind dispersal: Very light, Design catches the wind and enables fruits to move long distances.
5. Driving to Disney World in Florida, you pass orange groves with fruit hanging from the branches.

Have the orange trees produced flowers? (3 pts.) Please check one space.

☒ Yes    ☐ No    ☐ Not enough evidence

If they have produced flowers, have they been pollinated? (3 pts.) Please check one space.

☒ Yes    ☐ No    ☐ Not enough evidence

#### Part IV: Conservation

Please give three reasons why people are concerned about the loss of plant diversity (4 points each)

1. Practical reasons
2. Ecological reasons
3. Aesthetic and emotional reasons

Please list three ways in which people are reducing plant diversity (4 points each)

1. Habitat Destruction, Alien Species,
2. Overharvesting, Pollution, Climate Change
3.