

**ISLAND BIOLOGY - Sample Exam Questions**

Name \_\_\_\_\_

Part I (discussion questions) subtotal: \_\_\_\_\_

Part II (completion) subtotal: \_\_\_\_\_

Part III (true or false) subtotal: \_\_\_\_\_

Total points: \_\_\_\_\_

**Discussion questions – 40 pts**

1a. What may you conclude on the basis of the data provided for *Anolis springbreakiensis*. Note: Normal dewlap color is red, but in this experiment the dewlap color has been changed by the injection of yellow ink. As part of your answer discuss whether this is a sympatric or an allopatric species. 5 pts.

	<u>Female Sexual Receptivity</u>	
	Receptive	Nonreceptive
Test male		
Hyoidectomized male	2	10
Yellow-dewlapped males	10	2

1b. Describe the life cycle of botflies (Philornis). 5 pts.

\*\*\*\*\*

**Part II. Completion questions, 30 points.**

1. Other than Surtsey, provide the name of an island formed along the mid-Atlantic

Ridge \_\_\_\_\_

2. An example of an oscillating trait in Darwin's Finches is

\_\_\_\_\_

3. Why is the concept of nested subsets important to consider when designing preserves?

\_\_\_\_\_

---

---

---

4. Define and provide an example of character displacement.

---

---

---

---

5. How were the Hawaiian islands formed?

---

---

---

---

**Part III. True or False. 30 pts**

- \_\_\_ 1. The Diamond study on the Channel Islands provided support for the equilibrium theory of island biogeography.
- \_\_\_ 2. The malarial protozoan for avian malaria reached Hawaii via alien birds.
- \_\_\_ 3. Harris' proposed system for the management of forest habitat islands is based on a long-rotated system.
- \_\_\_ 4. The study on seed germination rates after immersion of seeds in saltwater suggest that seeds were unable to reach Surtsey via seawater dispersal.