

## **EEB 208 (Introduction to Conservation Biology)**

### **Sample Test Questions**

The test will consist of two parts. Part 1 will contain multiple choice questions. Part 2 will include questions that require you to write short answers, match pairs, identify things on diagrams, give definitions, fill in the blanks, etc.

The multiple choice questions in Part 1 will be different from the typical kind in which you pick 1 answer out of 4 or 5. In these questions there is a variable number of correct answers, with a range of possibilities from all answers incorrect to all answers correct. In each case you will be expected to circle all of the correct answers and to leave the incorrect answers uncircled.

The number of points given will be based both on the number of correct answers that are circled and the number of incorrect answers that are left uncircled. A half point will be assigned to each of the six parts (A - F). I use this type of multiple choice question because it makes it possible for me to assign partial credit in cases when you know something about the topic but do not have a completely correct answer. Although a lot people do not like them (because it is hard to get a question completely correct), I think that this is largely because of unfamiliarity. My experience is that these questions do a better job of testing what you know and put you in a better position to get at least some credit, which means that you'll probably do better than if I used conventional multiple choice questions.

Here's an example:

#### **Which of the following statements about this course are true (3 points)?**

- a. It is taught by Chris Elphick.
- b. It is taught by Queen Elizabeth II.
- c. It meets Monday and Wednesday at 2.
- d. It meets Monday, Wednesday and Friday at 11.
- e. It is not as interesting as calculus.
- f. Much of the course will focus on species extinctions and declines.

This question would be graded as follows:

Half a point each for circling a, c and f (see the syllabus).

Half a point each for not circling b, d and e.

If you circled a, d, and f you would have got 2 points out of 3 (because 4 out of the 6 parts of your answer were correct). If you circled e then you could try to persuade me that you deserve an extra half point, but it will be difficult.

If you're confused by this type of question, you can practice on the sample questions below. If you still don't get it, please come and talk to me. The point of these questions is not to confuse you but rather to make it easier for you to demonstrate what you do know. But it is probably a bit different from what you've seen before, so I encourage you to make sure you understand the system before the exam.

SAMPLE QUESTIONS:

Multiple choice questions: 3 points each

**1. Which of the following things have been suggested as reasons why conservation is important (3 points).**

- a. People like nature.
- b. Biodiversity is a source of building materials.
- c. Human health can be affected by biological diversity.
- d. Future generations have the right to experience the biological diversity that we see today.
- e. Ecosystems provide important services to humans.
- f. If too many species go extinct there might be an ecological catastrophe, like that on Easter Island.

**2. Using data collected from vets, researchers have studied the mortality rate of cats that have fallen from buildings to see whether the height of the fall influences the chance that the cat will die.**

**Surprisingly, they found that cats who fall from floors 1-5 were more likely to die than those that fell from higher up (floors 6-32). Why is this?**

- a. Falling from high up gives the cats time to position themselves so that they land safely.
- b. The data are biased.
- c. A mean is being compared to a median.
- d. Fewer cats fall from high floors than low floors.
- e. Vets don't see most of the cats that fall from higher floors.
- f. Cats that fall from high up relax allowing them to survive impact better.

**3. Which of the following statements about species richness are generally true?**

- a. Richness increases with increasing latitude.
- b. Richness is highest in the tropics.
- c. Richness is higher on islands than on the mainland.
- d. Richness is highest at high elevations.
- e. Richness is highest in hotspots.
- f. Richness increases with habitat complexity.

**4. How does the current rate of extinction compare to the background rate?**

- a. They are about the same.
- b. It is about ten million times greater.
- c. It might be as much as ten thousand times greater.
- d. It is lower, but scientists are not sure how much lower.
- e. It is about 100-1000 times greater.
- f. It is impossible to compare them.

**5. Climate change has been predicted to cause many changes in the future. Which of the following things are already happening? (3 points)**

- a. The length of growing seasons have declined.
- b. The extent of permafrost in the Arctic has increased.
- c. Globally, net primary production has decreased.
- d. Major ocean currents have changed direction.
- e. European butterflies have shifted their geographic ranges to the north.
- f. Birds in temperate areas have begun to breed later in the spring.

Short answer questions (one or two COMPLETE sentences per question).

Here's a few hints about answering this type of question. First, answering these questions only requires a couple of sentences. DO NOT WRITE DOWN EVERYTHING YOU KNOW ABOUT THE TOPIC, WHETHER IT RELATES TO THE QUESTION OR NOT (this approach will only waste time and annoy the person grading the question!). Second, write legibly – it is your responsibility to write something that can be read (and understood) easily by anyone; it is not the grader's responsibility to decipher hieroglyphics or sentence fragments. Third, if it says use complete sentences, then it REALLY MEANS USE COMPLETE SENTENCES.

**6. List five things that make a species especially vulnerable to extinction, and for each say briefly why it is important (5 points).**

**7. Define the following terms (6 points).**

a) **Keystone species**

b) **Beta-diversity**

c) **Endemic species**

**8. Describe two ways in which conservation biology is similar to medicine (2 points).**

To get the answers, [click here](#).