

Department of Biology

**Examination paper for (BI2045) (Sexual Selection and Communication)**

**Academic contact during examination: Sebastian Wacker**

**Phone: 40283798**

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**Examination time (from-to): 09-13**

**Permitted examination support material: None**

**Other information:**

All questions count equally for the grade

**Language: English**

**Number of pages (front page excluded): 1**

**Number of pages enclosed**

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| **Informasjon om trykking av eksamensoppgave Originalen er:**  **1-sidig □ 2-sidig □**  **sort/hvit □ farger □**  **skal ha flervalgskjema □** |

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Date Signature

Question 1

What is sexual selection, and how does it relate to natural selection? What role do variation in mating success and the relationship between mating and reproductive success play in sexual selection?

Question 2

In some animal species, females are equally or more strongly ornamented than males. Discuss explanations within and outside sexual selection for this observation. What factors can affect whether sexual selection acts on females and whether it acts more strongly in females than in males?

Question 3

Does sexual selection promote speciation? How can this question be studied? Give examples. Explain how sexual selection can promote speciation.

Question 4

Describe the question (phenomenon) that was the basis for two of the group projects, outlining why the question represents a 'biological puzzle' (i.e., a surprising or unexpected phenomenon). For each of the two topics, briefly list and define the main hypotheses explaining the phenomenon.