

# MINISTRY OF EDUCATION, HERITAGE AND ARTS

## YEAR 13 BIOLOGY

### REVISION WORKSHEET 8

Write the answers to the following questions in your exercise/activity books.

#### Biological Timing

a. Definitions and examples

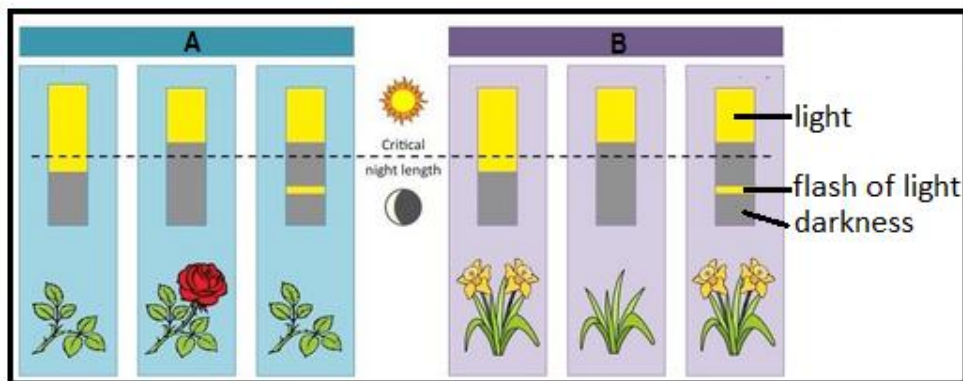
Define the following terms and give examples wherever possible.

- i. Biological clock
- ii. Ecological niche
- iii. Zeitgeber
- iv. Entrainment
- v. Brumation

b. Short Answer Questions

- i. Using examples, differentiate between the following pair of terms:
  - hibernation and estivation
  - kinesis and taxis
  - migration and homing
  - vernalisation and diapause

- ii. Consider the following experiment.



Source: <https://www.slideserve.com/>

- a. Identify the set of long day plants, A or B
- b. Give a reason for your choice.
- c. Explain the effect on light or darkness on flowering.

c. Tolerance

- i. Define tolerance
- ii. Using a local example from around your neighbor/environment, select two factors that affect tolerance for the flora (trees and shrubbery) around you.  
Explain how the factors you have chosen affects their growth.
- iii. Now think of factors that affect the distribution of plants and animals around Fiji. Some plants, eg rice, are found only in the wetter areas of Fiji, others, like sugarcane, in the hotter parts of the country. Do some research on why this is so and in 80-100 words, discuss the reasons for the distribution of plants in this manner.

**The End**