

REFERENCES: NEW BIOLOGY FOR TROPICAL SCHOOLS (*Stone and Cozens*)

INTRODUCTION TO BIOLOGY (*D.G Mackean*)

GERMINATION

1. a) Draw and label the longitudinal section of
 - i) A maize grain
 - ii) A bean seed.
 - iii) Give the functions of each of the labeled parts.

2. a) What is germination?
b) There are two types of germination, namely
 - i) Epigeal germination
 - ii) Hypogeal germination.Describe each type of germination above, with an example of a plant in each case.

3. a) What are the conditions that are necessary for the germination of a viable seed?
Explain why they are important.
b) There are experiments to demonstrate the 3 conditions necessary for germination.

Write about them in the format below:

Title of the experiment:

Apparatus or materials to be used:

Procedure:

Observation:

Conclusion:

The experiments are:-

1. EXPERIMENT TO SHOW THAT OXYGEN IS NECESSARY FOR GERMINATION.
 2. EXPERIMENT TO SHOW THAT WATER IS NECESSARY FOR GERMINATION.
 3. EXPERIMENT TO SHOW THAT A SUITABLE TEMPERATURE IS REQUIRED FOR GERMINATION.
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4. a) What is Seed Dormancy?
b) What are the causes of seed dormancy?
c) How is seed dormancy broken?

- 5.a)What is photosynthesis?
- b)Describe an experiment to test a leaf for starch.
- c)What are the necessities for photosynthesis?.i.e light,chlorophyll,water and Carbondioxide .
- d)Describe experiments to show each of the necessities for photosynthesis.
- e)Describe an experiment to show that Oxygen is given off during photosynthesis.
- f)What are the adaptations of a leaf for photosynthesis.
- g)What is Mechanism of photosynthesis(be very brief).
- h)What are the factors that affect the rate of photosynthesis.
- i)Explain how the factors affect the rate of photosynthesis.