



TEST PAPER: BIOLOGY

Time: 45 Minutes

Class: ICSE 10

Max. Marks: 30 Marks

Date: 8th Aug 2018

Marking Scheme: All questions carry 10 marks each. Subparts (A) and (B) carry 3 marks each and subpart (C) carries 4 marks.

Question 1:

A. Explain the following.

1. Cork & bark help in preventing loss of water.
2. Transpiration is a price paid for photosynthesis.
3. More transpiration occurs on the lower surface of a leaf.

B. Define.

1. Guttation.
2. Bleeding.
3. Transpiration.

C. Answer the following.

1. Explain any two types of photometers apart from Ganong's & what are they used to measure.
2. What are lenticels? What is lenticular transpiration? Is it possible for a young plant to perform it?

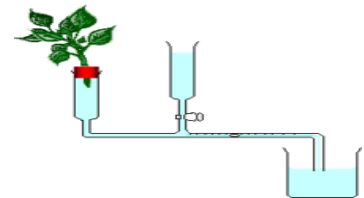
Question 2:

A. Differentiate (2 each).

1. Evaporation & transpiration.
2. Cuticular & stomatal transpiration.
3. Guttation & transpiration.

B. 1. What is the instrument called?

2. What does it measure?
3. Give its limitations.



C. If a leaf 'A' is coated with wax on both the surfaces and 'B' only on upper surface & 'C' on lower surface; then-

1. Which leaf will limp soon? Why?
2. Which one will show least limping?
3. If the plant is covered with a polythene bag with a cobalt chloride paper inside will happen?
4. If all the leaves of that plant are removed; will there be transpiration still? How?

Question 3:

A. Explain with reason how rate of transpiration gets affected by-

1. Humidity.
2. Sunlight.
3. Atmospheric pressure.

B. Give functions of

1. Guard cells.
2. Cuticle.
3. Water reservoir in a photometer.

C. Answer the following.

1. Give any four adaptations in a plant to reduce Transpiration.
2. How transpiration affects climate?
3. Is transpiration an excretory process? Explain.
4. What is suction force?