



DELHI PUBLIC SCHOOL NEWTOWN
SESSION 2021-2022
MONDAY TEST

CLASS: IX
SUBJECT:BIOLOGY

FULL MARKS: 40
DATE: 15.11.21

General Instructions:

- The paper consists of three printed pages.
- Answers should be to the point.
- Copy the question number carefully before answering the questions.
- Marks will be deducted for spelling errors.

1. Name the following: [5]

- a. The condition in which the stigma and anthers grow at different heights in a flower.
- b. Type of pollination affected by elephants.
- c. The distinct whitish oval scar on the concave side of a bean seed.
- d. The protective covering of the ovule.
- e. The first step of cellular respiration that occurs in the cytoplasm.

2. Fill in the blanks: [5]

Seed contains a dormant i. In a dry seed it is inactive. When placed in proper conditions, it becomes active and starts growing into a seedling. The changes leading to the formation of the seedling is called ii. For this process to occur, a seed needs iii, iv and v.

3. Differentiate between the following according to the criterion given in the brackets: [5]

- a. Autogamy and Allogamy (Definition).
- b. Ovary and Ovule (Fate after fertilization).
- c. Ornithophily and Hydrophily (Agent of pollination)
- d. Epigeal and Hypogeal germination (Position of cotyledon)
- e. Aerobic and Anaerobic respiration (Amount of ATP produced)

4. Answer the following questions: [5]

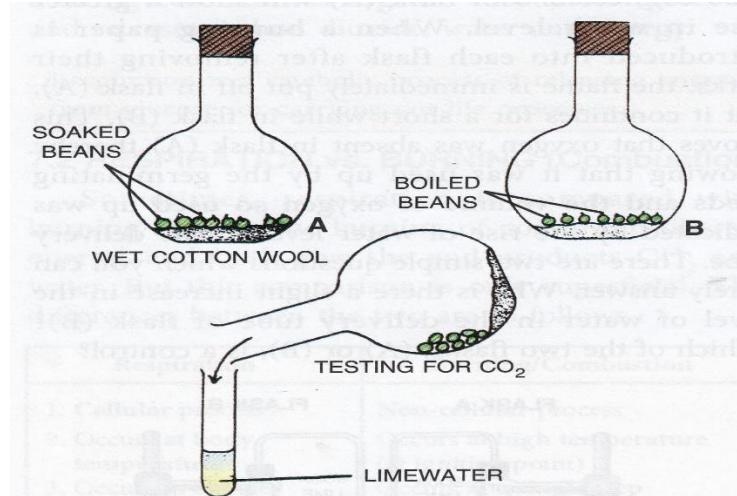
- i. Draw a neat labelled diagram to show the cut open section of a bean seed .
- ii. State two functions of the micropyle.

5. Give reasons for the following: [5]

- i. Respiration is a catabolic process.
- ii. It is good to sleep under a tree on a hot mid-day.
- iii. Water logged and compact soil affect respiration in roots.
- iv. Suitable temperature is essential for germination.

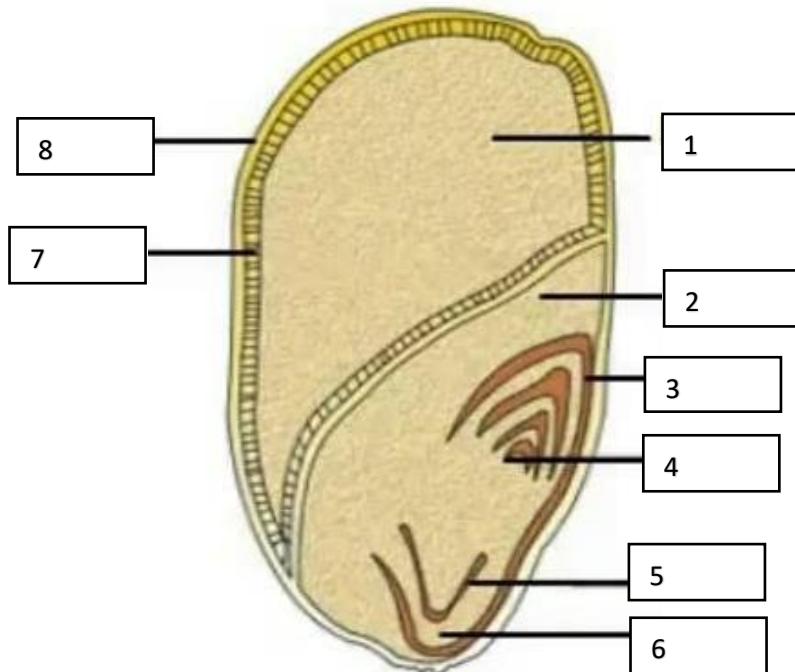
v. Seed germination in *Rhizophora* is called viviparous germination.

6. Answer the following questions by observing the diagrams given below: [5]



- i. State the aim of the experiment.
- ii. Why is carbolic acid added to flask B?
- iii. State your observation with reason in each case of flask A and B when tested for limewater.
- iv. Identify the physiological process shown in the experiment and define it.

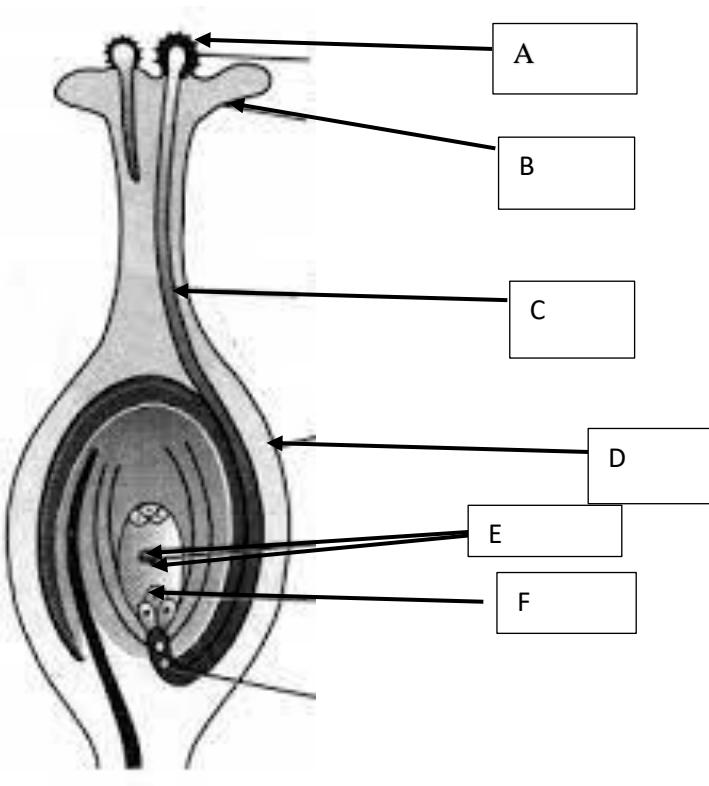
7. Observe the diagram given below and answer the following questions:- [5]



- i. Label the parts marked as 1 to 8.
- ii. State the function of the part labelled as 1.

8. Observe the diagram below and answer the questions that follow:-

[5]



- Label the parts marked as A to F.**
- Identify the process shown above and justify why is it so called.**