

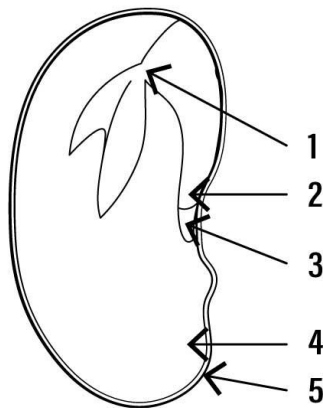
1. Give one word for the following

(2 ½)

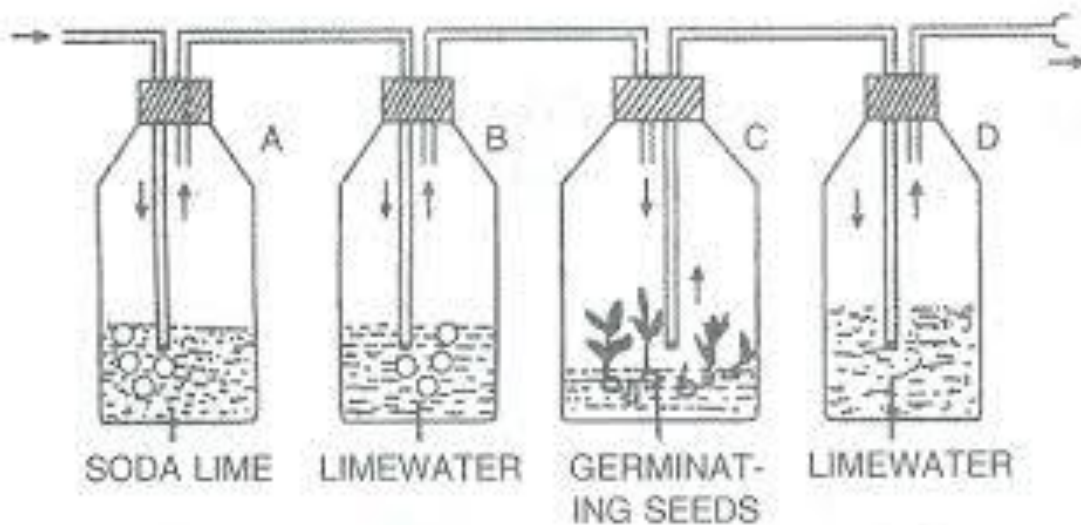
- a. A tiny pore for gaseous exchange situated close to the hilum in the seed
- b. Outer covering of the seed coat
- c. Seeds in which cotyledons are thin and membranous and endosperm persists
- d. The outermost layer of the endosperm which is rich in protein present in monocotyledonous seeds
- e. Type of germination in which hypocotyl elongates and cotyledons are pushed above the ground.

2. Label the given diagram

(2 ½)



3. Study the given experimental setup and answer the questions accordingly



- a. What is the purpose of Soda Lime solution in beaker number A

(½)

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- b. Why does lime water in beaker number D turn milky (½)
- c. Give the complete equation of aerobic respiration (1)
- d. Define seed dormancy (½)

**4. Answer the following questions**

- a. In the three bean seed experiment the first bean seed which is totally submerged in water initially shows germination but thereafter stops. Give reason why. (½)
- b. Define Viviparous germination (½)
- c. Give four major differences between aerobic and anaerobic respiration (2)
- d. Give one function of the following structures: (2)
- Coleoptile
  - Plumule
  - Tegmen
  - Endosperm

**5. What type of germination is seen in a maize grain? Represent diagrammatically all stages of germination (½ + 2)**

**6. Give reason why (5)**

- a. ATP is called the energy currency of the cell
- b. Anaerobic respiration is also called anoxybiotic process
- c. Seed sown very deep in the soil failed to germinate
- d. Optimum temperature is necessary for seed germination
- e. Water is needed to break seed dormancy

\*\*\*\*\* END \*\*\*\*\*