

HW

Q. How do the shoot and roots of the plants respond to the pull of earth's gravity?

Ans) Yes, shoot and roots of the plants respond to the pull of earth's gravity. Environmental factors are such as light, heat, cold, touch, taste, gravity etc. Almost most of the plants cannot move from one place to another because they are fixed to

the substratum on soil by root or root-like structures.

Q. Describe an activity to illustrate the phenomenon of phototropism and explain why does this occur?

- ans) Activity -
- i) Fill a conical flask with water.
  - ii) Cover the neck of flask with a wire mesh.
  - iii) Keeply 2-3 freshly germinated bean seeds on wire mesh.
  - iv) After 5-3 days we will notice that the shoots bend towards light and roots away from light. Now turn the flask so that the shoots are away from light and roots towards the light.
  - v) Leave this condition for 2-3 days undisturbed.
  - vi) Folding of leaves of mimosa plant is an example of acisemonasty.
  - vii) The cells of on the plants that are farthest from the light have a chemical called ~~auxin~~ auxin that reacts when phototropism occurs.