

High Order Thinking Skills

Q. 1. In how many ways does the growth of living system can be quantitatively compared?

Ans. The quantitative comparisons can be done in two ways:

(i) Absolute growth rate: It is the measurement and the comparison of total growth per unit time.

(ii) Relative growth rate: It is growth of system per unit time expressed on a common basis, **e.g.**, per unit initial parameter.

Q. 2. How can you raise Pfr value in Soyabean plant?

What is the effect of raised Pfr value?

Ans. Soyabean is a short day plant : The Pfr form of phytochrome is converted in Pr form by exposure of red light (wavelength 660 nm). The Pfr form is considered as the biologically active form of phytochrome. Germination and other phytochrome controlled processes are promoted by Pfr.

Q. 3. In most plants the terminal bud suppresses the development of lateral buds. What is this phenomenon called? Name the phytohormone that can promote the phenomenon.

Ans. In most plants the terminal bud suppresses the development of lateral buds. This phenomenon is called apical dominance. Auxins are the phytohormones which can promote this phenomenon in plants. *Example*, NAA and 2, 4-D etc.