

HSEIRKO - 13

81019-P

**BOTANY (Biology)**

Section - A

1. What is double fertilization ? Who discovered double fertilization in angiosperms ? List the post fertilization changes in angiospermic ovule.

Or

Explain the development of female gametophyte in angiosperms.

2. What are ecological interactions? Explain predation and parasitism with suitable examples

Or

What are agrochemicals ? Name three agrochemicals and explain their effects on environment.

Section - B

3. List three differences between self and cross pollination.

4. Differentiate between co-dominance and incomplete dominance in tabular form.

5. Explain briefly the idea of polygenic inheritance.

6. Explain three applications of tissue culture in plants.

Section - C

7. What is central dogma?

8. What are Bt. crops? List one Bt. crop.

9. Explain briefly energy flow in ecosystem.

10. What are biosphere reserves?

Section - D

11. (i) The dihybrid ratio of 9:3:3:1 proves the law of..... (Fill in the blank)

(ii) Ecology is the study of:

(a) Organism and environment

(b) Man and environment

(c) Soil and water

(d) Husband and wife (Choose the correct option)

(iii) Write True or False :

When a plant of hot climate is transferred to colder regions, it gets an injury called chilling

(iv) Name two bioherbicides.

(v) Name the most commonly used bio-weapon.