

7. Briefly describe various steps involved in plant breeding. Ans: Plant breeding is a purposeful manipulation of plant species in order to create desired plant types that are better suited for cultivation, give better yields and are disease resistant. The given flow chart shows various steps involved in plant breeding.

8. Explain what is meant by biofortification.

Ans: Enhancement of nutritional quality of a crop by improving the content and quality of protein, fats, vitamins, minerals and micronutrient is called biofortification. It helps to improve public health.

9. Which part of the plant is best suited for making virus-free plants and why?

Ans: The apical or axillary meristems are best suited for making virus free plants because they are generally free from virus.

10. What is the major advantage of producing plants by micro propagation?

Ans: It is faster method of producing a large number of plants. Plants formed by micro propagation are identical.

11. Find out the various components of the medium 12.used for propagation of an explant in vitro are ?

Ans: The various components of the medium used for propagation of an explant in vitro are

- Sucrose (source of energy & carbon)
- Inorganic salts
- Vitamins
- Growth regulators (auxins and cytokinins)
- 12. Name any five hybrid varieties of crop plants which have been developed in India.

Ans:

- 1. Sonalika (wheat)
- 2. Himgiri (wheat)
- 3. Pusa Swamim (mustard)
- 4. PusaSem2 (bean)
- 5. Pusa Sawani (lady's finger)

