

Question bank of Nursery management & Technology

Theoretical subject

Q/Answer Briefly the following questions:

1. Draw a figure explaining the general layout of a nursery with marking all the parts.
2. What is the important role of labor in the nursery and on the quality of horticulture crops?
3. Why seed dormancy is happening in horticultural crops?
4. What are the Artificial methods of vegetative propagation?
5. Define Mulching and enumerate (3) benefits of it.
6. How temperature affects the horticultural crops?
7. What are the properties of good growth Medium?
8. How can robots Reduce chemical usage in horticulture nursery?
9. Enumerate 6 components of good plant nursery?
10. Mention the financial resources for nursery.
11. What are mother plants mean and how can maintain them?
12. What is the importance of electricity in plant nursery?
13. List the steps of seed germination and draw a scheme for it.
14. Enumerate 3 disadvantages of vegetative/asexual propagation.
15. What are the differences between rhizomes and stolons (runners)?
16. Define (potting, re potting and de-potting).
17. What's the aim of packing nursery plants for transportation?
18. How biotic factors affect the plant growth in plant nursery?
19. Enlist three (3) important roles of nursery in horticulture.
20. Enlist six (6) types of nursery beds.
21. What is seed dormancy and what is its role in horticulture crops?
22. What is viviparous germination and what is its role in quality of horticulture crops?
23. Mention the difference between budding and grafting?
24. Define potting and what it is done for?
25. How moisture supply affects the horticultural crops?
26. How can robots allow selective harvesting in horticulture nursery?
27. Enumerate 4 points of the importance of nurseries.
28. Mention the three types of mother beds and describe sunken bed.
29. What are the disadvantages of sexual propagation? What's the importance of polyembryony for propagation of plants?

- 30.If you have a nursery how you decide how many number of plants must be planted in your nursery?
- 31.List the main 10 inputs to nursery?
- 32.Define seed viability and longevity.
- 33.In which type of plants these methods of propagations must be used?
A) Cutting B) Layering Enumerate practices of sanitation in nursery.
- 34.What's the difference between potting, re-potting and de-potting?
How temperature affects the plant growth?
- 35.Mention:
A) The three stages of plant growth.
- 36.B) The latest asexual propagation method for propagating plants and describes it.

Q/Correct the **bolded underlined words if they are false from the following sentences:**

1. **Bulbs** are swollen portions of an underground stem that store food so a plant can lie dormant over the winter.
2. The **plant growth stages** are: Explant establishment, shoot multiplication, rooting of shoots and Hardening and transfer to soil/field.
3. **Training** may include operations leading to staking or supporting to a nursery plants and it also primarily done to give proper shape to the nursery grown plants.
4. **Mulching** is defined as “the formulation and application of methods designed to protect plant health”.
5. **Environmental plant growth factors:** means all the internal factors that related with the cytogenetic of plants.
6. **Mother plant** is one of the financial resources for nursery.
7. **Seed longevity** means the presence of life in the seed.
8. The aim of **cutting** is the propagation of plants which do not root easily when detached from the mother plants.
9. **Packing** is practice of covering soil surface with organic or inorganic materials.
- 10.**Sanitation** means the process of removing excess water from the soil using artificial means so as to enhance crop production.
- 11.The first step in the seed germination process is the absorption of **Oxygen**.

12. **Plant tissue culture** means the multiplication of plants by both sexual and asexual means it can be considered an art-form.
13. **Cutting** is an operation for the removal of live or dead branches and pest and disease infested branches from nursery plants to check spread of pest and disease in nursery plants.
14. High concentrations of restricting substances like: aluminum, nickel, lead to **inhance** the plant growth.
15. The **liquid** phase is the main nutrient reservoir in soil media.
16. **Sphagnum moss** is residue of aquatic, marsh or swamp vegetation which is preserved under water in partially decomposed state.
17. **Labor** is one of the financial resources for nursery.
18. **Seed longevity** means the presence of life in the seed.
19. The aim of **grafting** is the regeneration of whole plants from plant cells that have been genetically modified.
20. **packing** is practice of covering soil surface with organic or inorganic materials.
21. **Genetic Factors** means all external conditions that influence life and development of an organism.

Q/Multiple choice questions:

- 1- The first step in the seed germination process is the absorption of
(Oxygen , water, nutrients)
- 2- means the multiplication of plants by both sexual and asexual means it can be considered an art-form.
(plant propagation, plant tissue culture)
- 3- is an operation for the removal of live or dead branches and pest and disease infested branches from nursery plants to check spread of pest and disease in nursery plants.
(training, cutting, pruning)
- 4- High concentrations of restricting substances like: aluminum, nickel, lead to the plant growth.
(inhance, inhibit, not affect)
- 5- The phase is the main nutrient reservoir of soil media.
(gaseous , liquid, solid)
- 6- is residue of aquatic, marsh or swamp vegetation which is preserved under water in partially decomposed state.

(sphagnum, peat, coco peat)

7- **is one of the financial resources for nursery.**

(mother plant, bank loans, mother beds)

8- means the presence of life in the seed.

(seed longevity, seed dormancy, seed viability)

9- is practice of covering soil surface with organic or inorganic materials.

(mulching, packing, training)

10- means all external conditions that influence life and development of an organism.

(genetic factors, environmental factors)

11- The aim of is the propagation of plants which do not root easily when detached from the mother plants.

(cutting, grafting, layering)

Q/Fill in the blanks with suitable words between the brackets: (Training, pruning, suckers, slips, Electricity, tools, viviparous, Mother beds, level beds).

1- are seed sowing beds prepared with fertile and clean nursery mixtures.

2- is used for operating power machineries and to provide control environment in nursery.

3- Some seeds may even germinate within the fruit called as..... germination.

4- A shoot arising on an old stem or underground part of the stem is known as.....

.....are operations leading to staking or supporting to a nursery plants and it also primarily has done to give proper shape to the nursery grown plants.

Q/ Make your answers by drawing pictures or schemes for the following:

1- Raised bed and sunken bed.

2- polyembryony.

3- The (S shaped) curve for factors affected plant growth.

Q/ Match the words in column A with the suitable words in column B.

Column A

1. Financial Resources for Nursery
2. Removing excess water from the soil
3. Environmental growth factors
4. Soilless media
5. Natural vegetative propagation structure

Column B

Sphagnum Moss
Slips
Private sector
Draining
Biotic factors

Column A

1. Inputs for Nursery
2. Sexual propagation
3. Removing excess water from the soil
4. Environmental growth factors
5. Soilless media
6. Natural vegetative propagation structure

Column B

Leaves
bulbs
propagules
Seed
Draining
Radiant energy

Column A

1. Financial Resources for Nursery
2. Vegetative propagation
3. Removing excess water from the soil
4. Environmental growth factors
5. Soilless media

Column B

Sphagnum Moss
Restricting substances
Private sector
Plant tissue culture
Draining