L1

Define Nursery

Write only 5 importance of Nursery.

Write only 5 Differences between permanent nurseries and temporary nurseries.

- **Classify nurseries according to specialization and Agricultural crops production.**
- **Classify nurseries according to the purpose of establishment.**
- **Classify nurseries according to the area.**

L2

Write the factors that need to be considered when a site is selected for establishing a nursery.

Write the points must be taken into account when choosing a nursery soil.

Why the nursery site should be located near the planting site? to minimize injury in handling and during transportation and reduce transportation cost.

Why the sites whose daily temperatures consistently exceed **40.5°C** for extended periods (**3 weeks or more**) should be **avoided** for establishing a nursery**?** because extremely hot periods **reduce growth** and may cause **burning of foliage**.

Why areas with frequent, long-lasting and high-velocity **winds** should be avoided for establishing a nursery? Due to the following three points:

1. Winds will affect **irrigation application** and **uniformity** and may result in **soil movement**.

2. **High winds** can **desiccate seedlings**, and soil carried by winds can **blast stems** and **foliage**.
3. Wind can restrict **spraying of pesticides**, cause tree-seed cover to be **blown away**, and **displace or scatter** seedbed **mulches**.

The soil should not be light or heavy to raise seedlings. **True**

Sandy loams or loamy sands with good drainage are excellent for nurseries. **True**

The contents of clay and silt in the soil should be within 15-25%. **True**

The soil depth of nursery should be around **1.20-1.50 m**. **True**

The **topsoil of nursery up to 1.25 m** depth should be free of **clay pan, hardpan, shale, iron concretions, calcareous substrate** layers. **True**

Why the top **45-50 cm of nursery** soil should be free from **stones**? because they may create problem in cultural operation.

Why is the optimum soil pH, for most tree species between pH 5.0 and 7.0? because soils of lower pH may have **fewer available nutrients**, whereas soils of higher pH encourage the invasion of **fungus diseases**.

Enumerate the components of a typical nursery and explain one of them.

L3

Define Plant Propagation and write its Importance

Define Sexual Propagation

Define **Asexual Propagation**

Write only 5 Advantages of Sexual Plant Propagation

Write only 5 disadvantages of Sexual Plant Propagation

Write only 5 Advantages of asexual Plant Propagation

Write only 4 disadvantages of asexual Plant Propagation

Why are the plants raised through asexual process **identical to mother plants?**

L4

Seed dormancy

Define Seed dormancy and write Advantages of seed dormancy.

Define Seed dormancy and write disadvantages of seed dormancy.

Seed dormancy in ***Crataegus*** *sp*.and ***Junipers*** *sp* **happen due to present hard seed coat** and **dormant embryo.**

Seed dormancy in ***Fraxinus*** *sp*. seed, occurs due to existence **inhibitors, hard seed coat,** and **immature embryo**.