

AGRICULTURE
OPENER TERM 3 EXAM
MARKING SCHEME
FORM 2

1. a) Seed bed

- This is a piece of land which has been prepared ready to receive planting materials. **b) Nursery bed.**

- This is a special nursery bed prepared for raising seedlings before transplanting. **c) Seedling bed**

- This is a special type of nursery bed used for raising seedlings which have been removed from the nursery bed due to overcrowding before they are ready for transplanting. **d) Pricking out.**

- This is the removal of seedlings from a nursery bed to a seedling bed. **e) Hardening off**

This is the practice of preparing seedlings to adapt to ecological conditions prevailing in the seedbed by gradually reducing shade and watering

2. Why nurseries are used in crop propagation

- They facilitate production of many seedlings in a small area.
- Routine management practices are easily and timely carried out.
- They make provision of best conditions for growth, such as fine tilth, levelled field and shade possible.
- They facilitate the planting of small seeds which develop into strong seedlings that are easily transplanted.
- They ensure transplanting of only those seedlings that are healthy and vigorously growing.
- They facilitate transplanting of seedlings that are already established thus reducing the period taken in the field.
- Excess seedlings from the nursery may be sold, thus become a source of income to the farmer. **3. Factors considered when selecting a nursery site** - Nearness to the water source.
- Type of soil.
- Topography - Previous cropping - Security.

- Well sheltered place.

4) Main nursery management practices

Mulching

Watering

Weed control

Pricking out

Shading

Pest and disease control

Hardening off

5) Methods of grafting

- Whip or tongue grafting
- Side grafting
- Approach grafting
- Bark grafting
- Notch grafting

6. a) Layering

This is the process by which a part of system is induced to produce roots while still attached to the mother plant,

b) Type of layering

- Marcotting/aerial layering
- Tip layering
- Trench layering
- Compound/serpentine layering

7. a) I - Marcotting/aerial layering

- II - Tip layering
- III - Trench layering
- IV - Compound/

8. Importance of tissue culture in crop production

- It is used to recover and establish pathogen free plants especially in the Control of viral diseases.

- It is used in the mass production of propagules.
- It is fast and requires less space than use of cuttings.

9. a) A - Whip/tongue grafting

B - Side grafting

C - Notch grafting

b) X - Scion Y -

Root stock

c) Compatibility

10. a) Budding

This is the practice of uniting a vegetative bud (scion) to a seedling of another plant (root stock) b)

Methods of budding

- T-budding
- Top budding
- Patch budding

11. Routine activities carried out on tree seedlings after transplanting

- Watering
- Mulching
- Provision of temporary shade to conserve moisture