

**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech. (Agrl. Engg.) 2024 Admission**  
**I Semester Final Theory Examination- February 2025**

**BES 1101**

**Crop Production and Protection Technologies (3+1)**

**Marks : 50**

**Time: 2 hours**

**I. Fill in the blanks.**

**(10x1=10)**

1. .... refers to the development of a new plant in an artificial medium under aseptic conditions.
2. .... is the recently developed soil order.
3. The method of sowing in which seeds are scattered manually.....
4. Urea is an example of ..... fertilizer.
5. Deflocculation of soil aggregates is due to the presence of .....  
**State True or False**
6. 2,4 D is a chemical weedicide.
7. Seed propagation is done to obtain true to type seedling.
8. Soil acidity can be ameliorated by adding gypsum.
9. Soil with higher bulk density is good for crop production.
10. Intercropping is better than monocropping.

**II. Write short notes on any FIVE of the following.**

**(5x2=10)**

1. Define sowing and what are the different methods of sowing?
2. Write on the solubility and compatibility of chemical fertilizer.
3. Orchard and its management.
4. Advantages of mulching.
5. Properties of soil colloids.
6. Sexual propagation, its advantages and disadvantages.
7. Methods of seed treatment.

**III. Answer any FIVE of the following.**

**(5x4=20)**

1. Describe the different plant propagating structures.
2. Important pest of horticultural crops in Kerala and its management.
3. What are weeds and how it can be managed?
4. The process of decomposition of organic matter in soil.
5. Soil colloids and their types.
6. Define training and what are the different methods of training of horticulture crops?
7. Importance of organic farming in the present scenario.

**IV. Write an essay on any ONE of the following.**

**(1x10=10)**

1. Discuss the role of manures and fertilizers in agriculture with suitable examples. Highlight the advantages and disadvantages of organic and inorganic fertilizers.
  2. Discuss the significance of irrigation water quality in agriculture productivity. Explain the key parameters used to access the irrigation water quality.
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