



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech.(Agrl. Engg.) 2023 Admission**  
**I Semester Final Examination - February 2024**

Sacs.1105

**Principles of Agronomy (2+0)**

**Marks: 50**  
**Time: 2 hours**

**I Fill in the blanks (10x1=10)**

1. .... is a plant where it is not desired
2. Most critical stage of irrigation in wheat is .....
3. .... Number of essential plant nutrients for plant growth
4. Diammonium phosphate (DAP) fertilizer contain ..... % of phosphorous.
5. Downward movement of water in unsaturated soil is called .....

**State True or False**

6. Forty six percentages (46%) nitrogen present in urea [CO(NH<sub>2</sub>)<sub>2</sub>] fertilizer.
7. Tillage reduces the micro-organism activity in soil.
8. 'Khaira disease of rice' is caused due to the deficiency of zinc.
9. South west Asia is believed to be origin of rice.
10. Old leaves become light green and chlorotic at the tip due to the deficiency of nitrogen.

**II Write short notes on ANY FIVE of the following (5x2=10)**

1. What is the zero tillage? write advantage and disadvantage of zero tillage.
2. Define weed. Write characteristics of weeds.
3. Advantages of irrigation scheduling
4. Differentiate between the relay cropping and inter cropping with example.
5. Define integrated farming systems and precision farming.
6. Criteria of essentiality of plant nutrients
7. Write critical stage of irrigation of different crops.

**III Answer ANY FIVE of the following (5x4=20)**

1. Write principles of organic farming.
2. Write different method of crop sowing.
3. Write different classification of nutrients.
4. Write water requirement of different crops.
5. Write role of water in plants.
6. Define Crop Rotation. write advantages of crop rotation.
7. Write different Classification of weeds with examples.

**IV Write an essay on ANY ONE of the following (1x10=10)**

1. Write in details about package and practices of kharif rice.
2. Define bio fertilizers. Write in details about types of bio fertilizers.

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