

**MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE**  
**SEMESTER END THEORY EXAMINATION**

**B.Sc.(Hons.) Agriculture**

Semester	: II (New)	Term	: Second	Academic Year	: 2021-22
Course No.	: AGRO 123	Title	: Fundamentals of Agronomy-II		
Credits	: 2 (1+1)				
Day & Date	: Tuesday, 13.09.2022	Time	: 09:00 to 11:00 hrs	Total Marks	: 40

- Note :**
1. Solve ANY EIGHT questions from SECTION 'A'.
  2. All questions from SECTION 'B' are compulsory.
  3. All questions carry equal marks.
  4. Draw neat diagram wherever necessary.

**SECTION 'A'**

- Q.1 Explain in brief the different soil moisture constants.
- Q.2 Define water use efficiency. Explain in brief the factors affecting water use efficiency.
- Q.3 Classify the methods of irrigation. Elaborate the merits and demerits of sprinkler irrigation system.
- Q.4 Define water requirement. Explain in short the factors affecting the water requirement of crops.
- Q.5 What is scheduling of irrigation? Enlist the various approaches of irrigation scheduling and explain any one.
- Q.6 Enumerate the components, merits and demerits of drip irrigation system.
- Q.7 Classify the soil water on the basis of physical forces and explain in short capillary water.
- Q.8 Discuss the causes of water logging and write in brief about crop management techniques in problematic areas.
- Q.9 Explain in short the strategies for utilization of poor quality water.
- Q.10 Write short notes on (Any Two):
- a) Methods of estimation of water requirement
  - b) Factors affecting water absorption
  - c) Role of water in plants

**SECTION 'B'**

- Q.11 Define the following terms:
- 1) Potential evapotranspiration
  - 2) Infiltration
  - 3) Irrigation interval
  - 4) Consumptive use
- Q.12 Fill in the blanks:
- 1) The annual precipitation of India is \_\_\_\_\_ M.ha.m. including snowfall.
  - 2) \_\_\_\_\_ is a component of drip irrigation known as heart of system.
  - 3) \_\_\_\_\_ crop is used as indicator plant for estimation of PWP.
  - 4) Soil water between the limits of field capacity and permanent wilting point is called \_\_\_\_\_.

