

**Roll No.**

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**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Sc.Hons. (Agriculture) (Sem.-5)**  
**SYSTEM SIMULATION AND AGRO-ADVISORY**

**Subject Code : BSAG-523-19**

**M.Code : 90959**

**Date of Examination : 06-01-2023**

**Time : 3 Hrs.**

**Max. Marks : 60**

### INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

- 1. Write briefly :**
- a) Limited nutrients conditions
  - b) Weather forecasting
  - c) Modelling techniques
  - d) Crop growth models
  - e) Crop weather calendars
  - f) System boundaries
  - g) Crop-weather calendar
  - h) System simulation
  - i) Crop models
  - j) Limited moisture conditions

## **SECTION-B**

2. Explain crop production in limited moisture and nutrients conditions.
3. Explain system approach for representing system boundaries.
4. Discuss the components of soil water and nutrients balance.
5. Discuss in detail about elementary crop growth models.
6. Explain system approach for representing soil-plant-atmospheric continuum.

## **SECTION-C**

7. Explain in detail about preparation of agro-advisory bulletin based on weather forecast.
8. Discuss the types, methods, tools and techniques of weather forecasting.
9. Describe the potential and achievable crop production concept and modelling techniques.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**