

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Agriculture

Semester	: III (New)	Term	: First	Academic Year	: 2022-23
Course No.	: AGRO 235	Title	: Rainfed Agriculture and Watershed Management		
Credits	: 2 (1+1)				
Day & Date	: Friday, 03.02.2023	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 What is drought? Give classification of drought and explain the classification based on time of occurrence.
- Q.2 Enlist the soil and water conservation measures and write in detail agronomical measures in rainfed farming areas.
- Q.3 Explain various problems associated with crop production in rainfed farming.
- Q.4 Write in brief soil and climatic conditions prevalent in rainfed areas.
- Q.5 What is contingency cropping? Explain the crop management options to mitigate the adverse effect of aberrant weather situation.
- Q.6 Define water harvesting and explain the different methods and techniques of water harvesting.
- Q.7 What do you mean by 'Crop adaptation'? Write in short about various mechanisms in plants for conserving water under drought conditions.
- Q.8 Define watershed management. Write in short its concept and state different principles of watershed management.
- Q.9 Explain in detail management of crops in rainfed farming.
- Q.10 Write short notes (Any Two):
- a) Factors affecting watershed management
 - b) Rainfall pattern in rainfed areas
 - c) Mulching

SECTION 'B'

- Q.11 Define the following terms:
- 1) Rainfed agriculture
 - 2) Biological bunding
 - 3) Cropping system
 - 4) Soil erosion
- Q.12 Fill in the blanks:
- 1) The Dry Land Research Station in Maharashtra is located at _____.
 - 2) The normal ratio between the erosion resisting crops and erosion permitting crops is _____.
 - 3) The line joining two points at equal elevation is called as _____.
 - 4) _____ is an area from which rainfall water is collected and drained through a common point.

