

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE  
SEMESTER END THEORY EXAMINATION

**B.Sc. (Hons.) Horticulture**

[ICAR-Sixth Deans' Committee Recommended Syllabus]

Semester	: II (New)	Term	: Second	Academic Year	: 2024-25
Course No.	: AGRO-121	Title	: Introduction to Major Field Crops		
Credits	: 3(2+1)	Time	: 10:00 to 13:00 hrs.		
Day & Date	: Thursday, 03.07.2025	Total Marks	: 80		
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 a) Define Agronomy and explain the scope of Agronomy.  
b) Enlist the agroclimatic zones of Maharashtra and explain Western Maharashtra Plain Zone.
- Q.2 a) Write in detail regarding the cultivation of Green gram on the following points:  
i) Ecology ii) Seeds and Sowing  
iii) Improved varieties iv) Harvesting and Yield  
b) Prepare a leaflet of Groundnut cultivation on the following points:  
i) Improved varieties ii) Manures and Fertilizers  
iii) Critical growth stages iv) Intercultural operations
- Q.3 a) Enumerate classifications of crops and explain it on the basis of Use or Agronomic classification.  
b) Enlist various methods of sowing and describe drilling method.
- Q.4 a) Prepare a leaflet of Maize cultivation on the following points:  
i) Preparatory tillage ii) Varieties  
iii) Fertilizer management iv) Yield  
b) Discuss the cultivation practices of Cotton on the following points:  
i) Soil and Climate ii) Seed bed preparation  
iii) Nutrient management iv) Economic importance
- Q.5 a) Discuss the cultivation practices of Rice on the following aspects:  
i) List of methods of rice cultivation ii) Dapog method  
b) Prepare a leaflet of Pigeon pea cultivation on the following points:  
i) Seed bed preparation ii) Seed rate  
iii) Seed treatment iv) Harvesting and Yield
- Q.6 a) Write in detail regarding the cultivation of Chickpea on the following aspects:  
i) Land preparation ii) Seed rate  
iii) Yield iv) Collection of acids  
b) Prepare a leaflet of Sorghum cultivation on the following points:  
i) Soil ii) Seed treatment  
iii) Seed rate iv) Disease management
- Q.7 a) Prepare a leaflet of Oat cultivation on the following points:  
i) Economic importance ii) Seed rate and Method of sowing  
iii) Manuring iv) Cuttings  
b) Prepare a leaflet of Soybean cultivation on the following points:  
i) Seeds and Sowing ii) Water management  
iii) Improved varieties iv) Harvesting and Yield

(P.T.O.)

- Q.8 a) Define Cropping system and enlist its types. Explain in brief the relay cropping.  
b) Write in detail regarding the cultivation of Sunflower on the following points:  
i) Economic importance ii) Soil and Climate  
iii) Sowing method iv) Harvesting and Yield
- Q.9 a) Discuss the cultivation practices of Sugarcane on the following points:  
i) Seed treatment ii) No. of set required  
iii) Irrigation and water management iv) Weed management  
b) Discuss the cultivation practices of Berseem on the following aspects:  
i) Soil and Climate ii) Improved varieties  
iii) Seed rate and Method of sowing iv) Harvesting and Yield
- Q.10 Write short notes on (Any Two):  
a) Characteristics of green manuring  
b) Principle of crop rotation  
c) Classification of manures and fertilizers

**SECTION 'B'**

- Q.11 Fill in the blanks:  
1) The system of growing different kinds of crop in quick succession on the same land, is known as \_\_\_\_\_ cropping.  
2) \_\_\_\_\_ is used for braking hard pans in sub-soil.  
3) The botanical name of Black gram is \_\_\_\_\_.  
4) \_\_\_\_\_ is an amide fertilizer.  
5) Mechanical manipulation of soil at high moisture regime, which reduces deep percolation loss, is termed as \_\_\_\_\_.  
6) The application of fertilizer in standing crop, is known as \_\_\_\_\_.  
7) The physical condition of soil resulting from tillage, is called as \_\_\_\_\_.  
8) The example of pulse crop grown for grain, fodder and green manure is \_\_\_\_\_.

- Q.12 Match the pairs:

- | 'A'          | 'B'                 |
|--------------|---------------------|
| 1) Soybean   | a) SRI              |
| 2) Sugarcane | b) Hydrocyanic acid |
| 3) Maize     | c) Aflatoxin        |
| 4) Rice      | d) King of Fiber    |
| 5) Sunflower | e) Tassel           |
| 6) Sorghum   | f) Wonder crop      |
| 7) Groundnut | g) Asteraceae       |
| 8) Cotton    | h) Arrow            |

