MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Horticulture

Semester	: II (New)	Term	: Second	Academic Year	: 2022-23
Course No.	: II/SSAC 122	Title	: Soil Fertility and Nutrient Management		
Credits	: 2 (1+1)				
Day & Date	: Tuesday, 08.08.2023	Time	: 9:00 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 Give the factors affecting soil fertility.

Q.2 Enlist the different types of mechanisms of transport of ions from soil to roots and describe any one mechanism in brief.

Q.3 How are acid soils formed?

Q.4 Give composition of organic matter.

Q.5 Define C : N ratio and give its importance.

Q.6 Define soil fertility evaluation and enlist its methods.

Q.7 Define integrated nutrient management. Enlist its components and state its importance.

Q.8 Classify the nitrogenous fertilizers on the basis of chemical form of nitrogen along with one example of each.

Q.9 Define biofertilizer and classify it.

Q.10 Classify organic manures.

SECTION 'B'

Q.11 Fill in the blanks:

1) _____ is the capacity of soil in its natural environment, to produce crops under a specified system of management and expressed in terms of crop yield.

2) _____ is a complex and rather resistant mixture of brown or dark brown amorphous and colloidal organic substance that results from microbial decomposition and synthesis and has chemical and physical properties of great significance to soils and plants.

3) _____ is an example of citric acid soluble phosphatic fertilizer.

4) Protein-folding-unfolding hypothesis of nutrient uptake was proposed by _____.

Q.12 Define the following terms:

1) Luxury consumption
2) Saline soil
3) Critical limit of nutrients
4) Complex fertilizers

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