

SAVITRIBAI PHULE PUNE UNIVERSITY
Progressive Education Society's
Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016
B.Sc. Blended Program
(A degree of Savitribai Phule Pune University equivalent to the degree of
University of Melbourne)

End Semester Examination : April 2025

Course code: CHM610(A)

Set: A

Course name: Chemistry of Soil and Agrochemicals

Credits: 2

Time: 1.5 hours

Maximum marks :25

Note:

- 1) All questions as compulsory
- 2) Figures to the right corner indicate full marks
- 3) Use of scientific calculators is allowed
- 4) Draw diagrams wherever necessary.
- 5) Use only Black or blue ink/ball/gel pens for writing.

Q1] Select the correct option. (Any 5)

[1x 05= 05M]

1. pH of extremely acidic soil is _____
a) below 4.5 b) below 3 c) 5.1 to 5.5 d) 4.1 to 5.0
2. Soil analysis provides _____
a) fertility status of soil b) plant nutrient deficiencies
c) micronutrient deficiencies d) all of these
3. Saline soil contain enough soluble salt to decrease the productivity of plant if _____
a) Leaching b) known as white alkali soil
c) contains excess chlorides of Ca and Mg d) all of the above
4. Formation of acidic soil is due to _____
a) Leaching b) microbial action
c) accumulation of organic residue d) all of the above
5. pH of calcareous soil depends on concentration of _____ in air
a) O₂ b) N₂ c) CO₂ d) Cl
6. Nitrogenous fertilizers are physiologically _____ fertilizer
a) acidic b) alkaline c) neutral d) acidic and alkaline

Q2] Answer in brief. (Any Five)

[2M ×5 =10 M]

1. Define fertilizer. Give an example.
2. Give physical properties of soil
3. What are nano pesticides? Give one example.
4. What is humus? Explain its functions.
5. Define vermiculture. Explain the technique in brief.
6. Give the importance of buffer action in agriculture.

Q3] Answer the following (Any Two)

[5 ×2=10M]

1. What are objectives of soil testing?
2. Explain the factors affecting efficiency of fertilizers.
3. Write the procedure of soil sampling.

---X---