



Progressive Education Society's  
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16  
(Autonomous)  
End Semester Examination: MAR / APR 2025  
Faculty: Science and Technology

Program: B.Sc General  
Program (Specific): B.Sc Chemistry  
Class: T.Y.B.Sc

Semester: VI

SET: A  
Course Type: SEC  
Max.Marks: 35

Name of the Course: Chemistry of Soil and Agro Chemicals

Course Code: 24-CH- 610 (A)

Time: 2Hr

Paper: X

**Instructions to the candidate:**

- 1) There are 4 sections in the question paper. Write each section on separate page.
- 2) All Sections are compulsory.
- 3) Figures to the right indicate full marks.
- 4) Draw a well labelled diagram wherever necessary.

**Q1) Define or Explain**

**5**

- a) Surface soil
- b) Reclamation
- c) Manure
- d) Biofertilizer
- e) Soil extraction

**Q2) Answer the following (any 4/6)**

**4**

- a) State functions of humus.
- b) What is degraded alkali soil?
- c) Draw structure of DDT.
- d) Give importance of agricultural chemistry.
- e) Write the formula of % of total salts.
- f) What are the limitations in usage of nano pesticides?

**Q3) Answer the following (Attempt any 4/6)**

**8**

- a) State factors affecting soil temperature.
- b) Explain the need of soil testing.
- c) What is soil extraction?
- d) Classify manures.
- e) Write a note on cation exchange in soil.
- F) Give structure and uses of BHC.



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**Q4) Answer the following (Attempt any 4/6)**

**8**

- a) Explain about calcareous soil.
- b) What are organo phosphorous insecticides? Give one example.
- c) Explain procedure for soil sampling.
- d) Classify nitrogenous fertilizers.
- e) How is E.C of soil measured?
- f) What is the effect of lime on acid soil?

**Q5) Answer the following (Any 2 out of 4)**

**10**

- a) Explain the procedure for standardization of pH meter.
- b) Differentiate between surface soil and sub soil.
- c) Give classification of pest control measure.
- d) Write a note on copper fungicides.

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