

QP CODE: 25020410



25020410

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS,  
FEBRUARY 2025**

**Sixth Semester**

**CHOICE BASED CORE COURSE - CH6CBT03 - SOIL AND AGRICULTURAL CHEMISTRY**

Common for B.Sc Chemistry Model I, B.Sc Chemistry Model II Industrial Chemistry & B.Sc Chemistry Model III  
Petrochemicals

2017 Admission Onwards

7A8008C4

Time: 3 Hours

Max. Marks : 80

**Part A**

Answer any **ten** questions.

Each question carries **2** marks.

1. Name three type of rock systems in formation of soil.
2. How temperature is acting as a physical weathering agent?
3. What are the advantages of using remote sensing in soil survey?
4. Differentiate flocculation and deflocculation of soil.
5. Write any two biological factors that cause soil degradation.
6. Define the term 'soil testing'.
7. Write any two soil microbes used in nitrogen fixation in soil.
8. How is pottasium deficiency treated in plants ?
9. Write any two methods for determining nutrient needs.
10. What do you mean by NPK value 10:5:20?
11. What are biofertilizers and how are they classified ?
12. Give examples for both Inorganic and organic pesticides.

(10×2=20)

**Part B**

Answer any **six** questions.

Each question carries **5** marks.

13. Explain the soilid,liquid and gaseous phase of soil.
14. Explain the role of soil temperature and soil air in plant growth.



15. Explain the ion exchange reactions of soil that affects nutrient availability, microbial activity and plant growth.
16. Point out soil and plant related problems arises due to use of poor quality water for irrigation.
17. Describe the uses of liquid fertilizers.
18. Write a note on micro nutrient fertilizers.
19. Explain the principle of fertilizer's use.
20. Describe the impact of pesticides on environment.
21. Describe about Copper fungicides.

(6×5=30)

**Part C**

Answer any **two** questions.

Each question carries **15** marks.

22. Write a note on 'Problem soil-causes and reclamation methods'.
23. Elaborate the role of nutrients in plant growth and their sources.
24. Explain (a) various factors affecting nutrient absorption (b) the deficiency symptoms of nutrient absorption.
25. Discuss Boron herbicides and arsenic herbicides. Which is one is better ? Justify your answer.

(2×15=30)