



22100932

QP CODE: 22100932

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS,**

**APRIL 2022**

**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

F7DCAF4E

Time: 3 Hours

Max. Marks : 80

**Part A**

Answer any **ten** questions.

Each question carries **2** marks.

1. Name some industrially important minerals present in soil.
2. What is frost action in soil formation process?
3. What are the uses of soil survey?
4. What is porosity of soil?
5. How soil colour influence soil temperature?
6. Define the term 'problem soil'.
7. What composes the soil organic matter?
8. What are macro and micro nutrients?
9. How is potassium deficiency treated in plants ?
10. Write each forms of nutrients in NPK fertilizers.
11. What is mixed fertilizers ? Give examples.
12. What is Bordeaux mixture ?

(10×2=20)

**Part B**

Answer any **six** questions.

Each question carries **5** marks.

13. Write a note on rock systems in soil formation.



14. Explain the role of soil temperature and soil air in plant growth.
15. Which are the factors that causes soil degradation?
16. Explain the characteristics that determine the quality of irrigation water.
17. Explain deficiency symptoms of secondary nutrient found in plant.
18. Explain nitrogen fixation.
19. Describe the efficient usage of various fertilizers.
20. Explain the charecteristics of pesticides.
21. Explain the classification of herbicides based on their mode of action.

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Write a short note on the followings .  
a) Nitrification b) Dentrification c) Nitrogen fixation in soil d) Biological nitrogen fixation
23. Explain the properties ,uses and relative efficiency of liquid fertilizers.
24. Briefly explain the production and quality control of azolla and blue green algae.
25. Write a note on impact of pesticides on plants,soil and environment.

(2×15=30)