



21101112

QP CODE: 21101112

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) EXAMINATION, APRIL 2021**

**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

BF657B91

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 carbonation helps in soil formation?
3. Write any two soil management practice that enrich soil health.
4. Name any four factors that affect the bulk density of soil.
5. Differentiate cation exchange and anion exchange of soil.
6. How electrical conductivity is related to the quality of irrigation water?
7. What do you mean by soil organic matter?
8. How is pottasium deficiency treated in plants ?
9. Give two examples of each natural and synthetic fertilizers
10. What is mixed fertilizers ? Give examples
11. What are biofertilizers and how are they classified ?
12. Carbofuran belongs to which type of pesticide?

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Is soil a resource for industry and agriculture? Explain.
14. Explain the following (a) surface density of soil (b) soil colour.
15. Which are the factors that causes soil degradation?



16. How problem soil affects the growth of plants on soil?
17. Write a note on role of micro nutrient in plant growth.
18. Explain nitrogen fixation.
19. Explain Integrated Nutrient Management (INM).
20. Give a note on pesticide acts and laws.
21. Describe about Copper fungicides.

(6×5=30)

### Part C

*Answer any **two** questions.  
Each question carries **15** marks.*

22. Explain various methods used in bioconversion of agricultural waste.
23. Explain
  - (a) various factors affecting nutrient absorption
  - (b) the deficiency symptoms of nutrient absorption
24. Explain the properties, uses and relative efficiency of liquid fertilizers
25. Explain nitrocompounds, propionic acid derivatives and boron compounds as herbicides.

(2×15=30)