



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?

 $(10 \times 2 = 20)$

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.
- Which are the factors that causes soil degradation?



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- 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.

 $(6 \times 5 = 30)$

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.

 $(2 \times 15 = 30)$

