2025 II 21 **0930** **Seat No.** | | | | | |

Time : 2 Hours **CHEMISTRY (Vocational)**

Subject Code

V	4	2	9	1

Total No. of Questions : 23 (Printed Pages : 4) **Maximum Marks : 50**

***INSTRUCTIONS* :** (*i*) There are *four* sections in the question paper (A, B, C & D) consisting of **23** questions.

(*ii*) Figures to the right indicate marks allotted to each question.

(*iii*) Write the number of each question clearly on the answer-book.

(*iv*) Non-scientific and non-programmable calculators are allowed.

SECTION A

Question Nos. 1-4 : Choose the appropriate alternative. (MCQ)

Question Nos. 5 & 6 : Answer in a one word/phrase or figure.

Question Nos. 7 & 8 : Answer in one sentence.

1. Fertilizer which contains only one plant nutrient as the major nutrient is called 1

- Complex fertilizer
- Liquid fertilizer
- Mixed fertilizer
- Straight fertilizer

2. Organic compounds with a ring structure that are made up of element, such as N, O, or S in addition to carbon is called 1

- Homocyclic compounds
- Heterocyclic compounds
- Acyclic compounds
- Aromatic compounds

3. Methyl eugenol trap is effective against 1

- Butterfly
- Rice moth
- Fruit fly
- Hairy caterpillar

4. Identify the functional group structure of Aldehydes. 1

- C-C
- OH
- C=C
- CHO

5. Give *one example* of an Enzyme. 1

6. Name the soil formed due to the diffusion of iron in the metamorphic rock. 1

7. What is Farm Yard Manure ? 1

8. What are Lipids ? 1

SECTION B

Question Nos. 9-14—Answer in *two* or *three* lines.

9. State any *two* properties of enzyme. 2

10. Give *two* points of difference between DNA and RNA. 2

11. Name *two* important ores of iron. 2

12. Why cow dung is considered the best form of manure ? 2

13. Name any *two* plant derived products that can be used as an insecticides. 2

14. State any *two* nitrogen fixing bacteria. 2

SECTION C

Question Nos. 15-20—Answer in 3-4 lines :

15. Explain the steps involved in soil testing. 3

16. Describe the role of nitrogen nutrient in plant growth. 3

17. Draw a neat labelled sketch of plant cell. 3

18. Calculate the molarity of solution containing 5.6 g of KOH dissolved in water to make 500 ml solution. (Atomic mass K = 39, O = 16, H = 1) 3

19. Explain the role of proteins in the body. 3

20. Write a short note on Alluvial soil. 3

Or

20. Write a short note on Laterite soil.

SECTION D

Question Nos. 21-23—Answer in 4-5 lines :

21. Explain the different types of rocks. 4

22. With neat chemical equation explain the preparation of carbon dioxide gas. 4

23. Classify the pesticide on the mode of entry in the body of pest. 4

Or

23. Classify the pesticide on the mode of chemical nature.