

2025

**M.Sc. in Agriculture
1st Semester Examination**

AGRONOMY

Paper : AGRON-505

[Conservation Agriculture]

Full Marks : 70

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *five* questions : 2×5=10

1. Define Conservation Agriculture.
2. Define Carbon Sequestration.
3. Define role of Integrated Pest Management in CA.
4. Define Cover Crop Management in CA.
5. Briefly explain one farm machinery used in CA.
6. What is precision planter?

P.T.O.

(2)

7. Mention two examples of natural carbon sequestration.
8. What is a No-till Seed Drill?

Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. Write the major differences between Conventional and Conservation Agricultural System.
10. Briefly describe the present status of Conservation Agriculture in India.
11. Define Nutrient Management in CA.
12. Write short notes (any *two*) : $2\frac{1}{2} \times 2 = 5$
 - (a) Precision Nutrient Management
 - (b) Efficient water use implemnts in CA
 - (c) Mulching
 - (d) Direct Air Capture (DAC)
13. Briefly explain the agronomics, economic, and environmental benefits of CA.
14. Discuss weed management in CA.

Group - C

Answer any *two* questions : $10 \times 2 = 20$

15. Illustrate how Conservation Agriculture helps farmers in terms of socially and economically.

(3)

16. Briefly explain "Conservation agriculture and agroforestry are two separate but complementary approaches to sustainable land management".
17. Define Agroforestry. Discuss the importance of Agroforestry. Give botanical names of any two multipurpose trees. 2+6+2
18. Explain the sum initiative programmes related to CA adaptation in India. Discuss the role of CA in climate change mitigation. 5+5

Internal Assessment : 20 marks
