

2025

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

AGRONOMY

Paper : AGRON-503

[Principles and Practices of Weed Management]

(Practical)

Full Marks : 30

Time : Three Hours

The figures in the margin indicate full marks.

*Candidates are required to give their answers
in their own words as far as practicable.*

1. Answer the following questions : 5

- (a) Calculate the volume of pendimethalin (30%) required for a 30,000 m² wheat field if the application rate is 1.2 kg a.i. ha⁻¹.
- (b) Calculate the area (m²) and volume of water required for the application of 2 litres alachlor@ 2.2 kg a.i. ha⁻¹. The active ingredient is 60% and the optimum volume of water for spray is 600 L ha⁻¹. Also calculate the concentration (%) of the spray solution.

P.T.O.

2. Answer the following questions : 10

Calculate weed control index and weed index in rice crop from the following data :

- (a) Dry weight of grasses, sedges and broad-leaved weeds at 70 DAS are 9, 4 and 1.5 gm^{-2} , respectively, in butachlor treatment.
- (b) Dry weight of grasses, sedges and broad-leaved weeds at 70 DAS are 28, 10 and 60 gm^{-2} , respectively, in weedy condition.
- (c) Grain yield of rice in butachlor treatment = 35 q ha^{-1} .
- (d) Grain yield of rice in weed-free condition = 42 q ha^{-1} .

3. Laboratory Notebook 5

4. Viva-voce 10
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