



ADITYA UNIVERSITY

B.Tech – I Semester End Examinations Supplementary – Dec 2025

CROP PRODUCTION AND PROTECTION TECHNOLOGIES (Agricultural Engineering)

Time: 3 hours

Max. Marks: 100

Answer ONE question from each unit

All Questions Carry Equal Marks

All parts of the questions must be answered at one place only

UNIT-I

- 1 a What are the basic practices of crop production? L1 CO1 [10M]
b Write down the principles of tillage and Explain about the types of tillage. L2 CO1 [10M]

(OR)

- 2 a List out the methods of application of fertilizer. Explain any two methods. L2 CO1 [10M]
b Describe about Sustainable Agriculture. L2 CO1 [10M]

UNIT-II

- 3 a Define weed? Explain the methods of weed management. L2 CO2 [10M]
b Explain about the parameters to be considered for assessing quality of irrigation water. L2 CO2 [10M]

(OR)

- 4 a Write differences between mixed cropping and intercropping. L2 CO2 [10M]
b Discuss about the relay cropping and cropping scheme. L2 CO2 [10M]

UNIT-III

- 5 a Illustrate the soil forming process. L2 CO3 [10M]
b Explain about soil particle distribution. L2 CO3 [10M]

(OR)

- 6 a Explain the Ion exchange in soil and nutrient availability. L2 CO3 [10M]
b Describe the acidic, saline and sodic soils. L2 CO3 [10M]

UNIT-IV

- 7 a How to identify nutrient deficiency symptoms of crops in the field. L2 CO4 [10M]
b Explain about inorganic fertilizers and their reactions in soil. L2 CO4 [10M]

(OR)

- 8 a List out the types of liquid fertilizers. Explain any one type. L2 CO4 [10M]
b How to use Gypsum for reclamation of sodic soils and neutralizing RSC. L2 CO4 [10M]

UNIT-V

- 9 a Define seed treatment? Explain one method of seed treatment. L2 CO5 [10M]
b Write a short notes on Pruning and training of horticulture crops. L1 CO5 [10M]

(OR)

- 10 a What type of water requirement methods are given for horticulture crops. Explain any one method. L2 CO5 [10M]
b Explain about sowing and transplanting methods of horticulture crops. L2 CO5 [10M]
