

Reg. No:

--	--	--	--	--	--	--	--	--	--

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech IV Year I Semester Regular & Supplementary Examinations Feb-2021

GREENHOUSE TECHNOLOGY

(Agricultural Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Write the brief history of greenhouse and greenhouse effect. 6M
b Write advantages of greenhouse. 6M

OR

- 2 a Explain about temperature, ventilation and carbon dioxide. 6M
b Write about the carbon dioxide requirement to the crop. 6M

UNIT-II

- 3 Write about the greenhouse supplemental lighting systems and its use. 12M

OR

- 4 a Explain about the active summer cooling systems with neat diagram. 7M
b Briefly explain about the carbon dioxide enrichment methods. 5M

UNIT-III

- 5 a Write about the selection of covering materials for greenhouse. 6M
b Briefly explain about the materials used for construction of greenhouse. 6M

OR

- 6 a Write about the polyvinyl chloride film. 5M
b Write about polyvinyl chloride rigid film. 7M

UNIT-IV

- 7 a Explain about drip irrigation. 6M
b Explain about overhead sprinklers. 6M

OR

- 8 a Explain the design criteria of construction of greenhouse. 6M
b Write about the construction details of glass greenhouse. 6M

UNIT-V

- 9 a Write in detail about use of simplified protected agriculture techniques. 6M
b Enlist the types of row covers and explain about perforated plastic tunnels with sketch. 6M

OR

- 10 a Explain the capital requirements followed for protected agriculture. 6M
b Explain how the greenhouse economy be improved. 6M

*** END ***