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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech II Year II Semester Supplementary Examinations February 2022

FARM MACHINERY & EQUIPMENT-I

(Agricultural Engineering)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 Explain about objectives of farm mechanization and classification of farm machines. 12M

OR

- 2 Explain in briefly about treatment of steel. 12M

UNIT-II

- 3 Distinguish between mould board plough and disc plough with neat sketches. 12M

OR

- 4 Explain in briefly about classification and types of tillage. 12M

UNIT-III

- 5 Explain terminology related to earth moving equipments. 12M

OR

- 6 a Explain the excavator and bulldozer? 6M

- b Explain about shovels. 6M

UNIT-IV

- 7 Explain the different fertilizer metering mechanisms with neat sketches. 12M

OR

- 8 a Solve the problem: The following results were obtained while calibrating a seed drill. Calculate the seed rate per hectare 6M

i) Number of furrows = 10

ii) Spacing between furrows = 20 cm

iii) Diameter of drive wheel = 1.5 m

iv) Speed = 500 rev/min

v) Seed collected = 20 kg.

- b Explain in briefly about the fluted feed metering mechanism. 6M

UNIT-V

- 9 a What are the functions of sprayer? 6M

- b Explain in brief about calibration of a sprayer. 6M

OR

- 10 Illustrate about different types of sprayers. 12M

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