

SECTION-D

No. of Printed Pages : 4

220133

Roll No.

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Describe the working principle of seed-cum-fertilizer drill. Also explain different types of seed metering mechanisms used in seed drills.

Q.24 Describe the constructional details and working principle of potato planter. Also explain preventive maintenance of planters.

Q.25 Explain the constructional details and working principle of Disc Harrow along with different components and their function.

(40)

(4)

220133

3rd Sem / Agriculture Engg.

Subject : Farm Machinery & Implements-I

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 A machine used for sowing wheat in the freshly harvested rice fields without any extra tillage operation.

- a) Seed drill
- b) Strip till drill
- c) No till drill
- d) Zero till drill

Q.2 The application of engineering and technology in agricultural operations to do a job is

- a) Standardization
- b) Mechanization
- c) Advancement
- d) Engineering Mechanics

Q.3 Tilt angle varies from

- a) 10 to 15°
- b) 15 to 25°
- c) 25 to 30°
- d) 30 to 35°

(1)

220133

- Q.4 The maximum clearance between the landside and a horizontal plane touching point of share at its gunnel side and heel of landside.
- Horizontal clearance
 - Vertical suction
 - Horizontal suction
 - Vertical clearance
- Q.5 A method of eliminating unwanted forces
- Vibration
 - Balancing
 - Tension
 - Centrifugal force
- Q.6 The process of random scattering of seeds on the surface of seed bed
- Dibbling
 - Drilling
 - Broadcasting
 - Seeding

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Give the function of furrow opener.
- Q.8 What is the function of subsoiler?
- Q.9 Name two types of pipe joints used in agriculture machinery.
- Q.10 What is the use of drawbar?
- Q.11 Name farm machines according to hitching?
- Q.12 What is the function of paddy weeder?

(2)

220133

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Describe the working of zero tillage machinery.
- Q.14 What are different methods of sowing?
- Q.15 Write down the objectives of tillage.
- Q.16 Explain the working principle of potato digger.
- Q.17 What is the difference between disc plough and mould board plough?
- Q.18 Write a short note on balancing a farm machinery.
- Q.19 What are the harmful effects of vibrations in machines?
- Q.20 How seed drill is different from planter?
- Q.21 What is the function of bearing in farm machines?
- Q.22 What are different types of furrow openers?

(3)

220133