Q.34 What is the scope of mechanization.

Q.35 State different types of kinematic pair.

SECTION-D

Note : Long Answer type question. Attempt any two questions. (2x10=20)

Q.36 Describe the constructional details and working principle of Seed-Cum-fertilizer drill.

Q.37 Explain the constructional detail and working principle of Rotavator. Also state its advantages over other tillage implements.

Q.38 Explain the working principle and constructional detail of hydraulic system. Also explain its different types in brief.

b)

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Roll No.....

Branch : AGRI

Subject : Farm Machinery & Implement-I

Time : 3 Hrs. **M.M. : 100**

SECTION-A

Note : Multiple choice questions. All questions are compulsory. (10x1=10)

Q.1 The implement used for inter cultivation

a) Wheel hand hoe b) Plough

c) Ridger seeder d) Digger

Q.2 The process of placing the seeds in holes made in seed bed

a) Dibbling b) Drilling

c) Broadcasting d) Seeding

Q.3 The application of engineering and technology in agricultural operations to do a job in a better way to improve productivity.

a) Standardization b) Mechanization

c) Advancement d) Engineering Mechanics

Q.4 The Maximum clearance under the landside and the horizontal surface in the working position.

a) Horizontal clearance

b) Vertical suction

c) Horizontal suction

d) Vertical clearance

Q.5 A method of correcting or eliminating unwanted forces

a) Vibration b) Tension
c) Balancing d) Centrifugal force

Q.6 Tilt angle varies from
a) 10 to 15^0 b) 15 to 25^0
c) 25 to 30^0 d) 30 to 35^0

Q.7 The power available at farm for different farming operations
a) Electric Power b) Human power
c) Farm Power d) Mechanical Power

Q.8 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.9 It is a part of a machine which has been manufactured without the operation of assembly
a) Element b) Link
c) Bearing d) Joint

Q.10 The mechanical manipulation of soil to provide favorable conditions for crop production is
a) Ploughing b) Tillage
c) Inter culturing d) Harrowing

SECTION-B

Note : Objective type questions. All questions are compulsory. (10x1=10)

Q.11 State the function of chisel plough.

Q.12 List two types of coupling used in Agricultural machinery.

Q.13 What is the need for balancing.

Q.14 What is the use of drawbar?

Q.15 Write two harmful effects of vibration.

Q.16 Give the function of subsoiler.

Q.17 Name two plough accessories.

Q.18 Give the function of furrow opener.

Q.19 What is the use of three point linkage?

Q.20 Enlist four methods of sowing.

SECTION-C

Note : Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 What are harmful effects of vibrations in machines?

Q.22 Explain the working principle of potato planter.

Q.23 What are the conditions for maximum power transmission?

Q.24 Explain the routine maintenance of farm machinery.

Q.25 Classify the farm machines/implements based on hitching.

Q.26 What is the need of balancing a farm machinery?

Q.27 What are different components of Disc harrow?

Q.28 What is the function of bearing in farm machines?

Q.29 What are the benefits of zero tillage machinery?

Q.30 What are different adjustments of disc plough?

Q.31 What is the effect of centrifugal tension?

Q.32 Write a short note on transplanting.

Q.33 Give two differences between mould board plough and disc plough.