

**SYLLABUS FOR COMPUTER BASED RECRUITMENT TEST (CBRT)**  
**FOR THE POST OF MECHANICAL CULTIVATION OFFICER UNDER**  
**DIRECTORATE OF AGRICULTURE**  
**(Adv 1 Year 2021)**

- I. General English including Grammar - 10 marks**
- II. General Knowledge, Current Affairs and Events of National and International Importance - 10 marks**
- III. Logical Reasoning and Analytical Ability - 25 marks**
- IV. Core: - 30 marks**

**Farm Power**

- Renewable Energy
- Measurement of Engine Power
- Governor, Fuel System, Lubrication System, Ignition System, Cooling System

**Farm Tractor**

- Classification and Selection of Tractors
- Power Transmission System, Clutch and Fluid Coupling, Transmission gears and Torque Converter, Differential Unit and Final Drive, Steering system and Brake, Hydraulic Control System, Hitch and Control board, Tyre and Front Axle, Traction and Traction theory of Tractor of Tractor
- Estimating the cost of Tractor Power
- Repairing, maintenance and storage of tractor
- Mechanics of Tractor Chassis
- Tractor Engine performance
- Power Tiller

**Tillage Implements**

- Classification and Types of Tillage
- Forces acting on tillage implements
- Ploughs, harrows, cultivators, hoes
- Estimation of cost of operation, power requirement

**Seeding and Fertilizer Equipment**

- Seeding methods and seed metering mechanism
- Calibration of seed drill and seed cum fertilizer drill
- Designing of equipment and cost estimation

**Pumps for Irrigation**

- Components and Accessories
- Installation
- Trouble shooting
- Types of pumps
- Estimation of cost of operation, power requirement

**Plant Protection equipment**

- Types of sprayers and Duster
- Components of sprayers and Duster
- Types of sprays, nozzles
- Selections of sprayer/ duster

### **Harvesting and Threshing equipment**

- Types of harvester and thresher- manual and power operated
- Mower, Reaper
- Power thresher
- Installation of power thresher
- Trouble shooting in power thresher
- Combine harvester

### **Processing Equipments**

- Different Processing Equipments- Chaff Cutter, Feed Grinders, Groundnut Decorticators, Rice Processing, Seed Processor, Driers

### **Note:**

**\* Duration for C.B.R.T : 75 Minutes**

**\*Maximum Marks for C.B.R.T : 75 Marks**

Uploaded by GPSC on 11/03/2021