

SYLLABUS FOR THE SCREENING TEST OF GARDENING ASSISTANT/ASSTT. SUPERINTENDENT GARDENS

SYLLABUS FOR GARDENING ASSISTANT

Agriculture, its importance in national economy; factors determining agro-ecological zone and geographic distribution of crop plants.

Important crops of India, cultural practices for cereal, pulses, oil- seed, fibre, sugar and tubre crops and the scientific basis for these corporation; multiple and relay cropping inter- cropping and mixed cropping.

Soil as a medium of plant growth and its composition, mineral and organic constituents of the soil and their role in crop production; chemical, physical and microbiological properties of the soils. Essential plant nutrients, their functions, occurrence of cycling in soils principles of soil fertility and its evaluation for judicious fertilizer use. Organic manures and bio fertilizers, straight, complex and mixed fertilizers manufactured and marketed in India.

Principles of plant physiology with reference to plant nutrition, absorption, translocation and metabolism of nutrients. Diagnosis of nutrient deficiencies and their amelioration photosynthesis and respiration, growth and development auxins and harmones in plant growth.

Elements of Genetics and plant breeding as applied to improvement of crops; development of plant hybrids and composites, important varieties, hybrids and composites of major crops.

Important fruit and vegetable crops of India, the package of practices and their scientific basis, crop rotations, intercropping, and companion crops, role of fruits and vegetables in human nutrition; post harvest handling and processing of fruits and vegetables.

Serious pests and diseases affecting major crops. Principles of pest control, integratec control of pests and diseases; proper use and maintenance of plant protection equipments.

Principles of economics as applied to agriculture.

Farm planning and resource management for optimal Production. Farming system and, their role in regional economies.

Philosophy objectives and Principles of extension. Extension organisation at the State District and block levels their structure, functions and responsibilities. Methods o Communication, Role of farm organizations in extension service.