

GOVERNMENT OF ARUNACHAL PRADESH  
DEPARTMENT OF HORTICULTURE  
ITANAGAR

Notification

NO.PD (ES)-34/2007,  
Dated Itanagar the \_\_th July, 2017.

**Subject: - Syllabus for recruitment to the post of Horticulture Development Officer, Examination/.**

**"A" WRITTEN EXAMINATION**

1. General English (Expression & Unseen passage) = 100 marks.
2. General Knowledge (including current events and of such matters to every day Observation and expression from an educated person who has made no special Study on any). = 100 marks.
3. Horticulture Science = 2 (two) papers.
  - 1). Paper -I = 100 marks.
  - 2). Paper - II = 100 marks.

**"B" - VIVA VOICE** = 50 marks.

**Total = 450 marks.**

For those who will be declared qualified by obtaining such minimum marks in the written examination as may be decided by the APPSC will conduct the examination/Viva-Voice test as per the provision of the service rule.

**Paper-I**

1. **Pomology** :- Definition, its scope, importance & production of fruit crops in India & Arunachal Pradesh, cultivation of Apple, Walnut, Citrus, Kiwi plum, Chestnut, Guava, Banana, Pineapple and uses of varieties and its cultural practices.
2. **Olericulture** :- Definition, Classification, its scope productions and importance of growing vegetables in Arunachal Pradesh, cultural practices of major vegetables crop I; Cabbage, Cauliflower, Potato, Okra, Brinjal, Beans, Pumpkin, Cucumber etc.
3. **Floriculture** :- Definition, its scope & landscaping in Arunachal Pradesh, Cultural Practices of Roses, Begonia, Marigold, Calendula, Salvia, Chrysanthemum, Gladiolous, Orchids, Anthurium etc.
4. **Medicinal, Aromatic & Species Plants** :- Scope, opportunities & constrain in cultivation of medicinal, aromatic and spices in India & Arunachal Pradesh, cultural practices, training, promising of medicinal, Aromatics & spices crops, preparation of nurseries, after care and its importance in therapeutic and pharmaceutical uses.

Agro climate zone of India and Arunachal Pradesh, Nature and Scopes of Horticulture and its importance in Arunachal Pradesh, Classification of Horticulture Plants, Production and scopes of Horticulture crops in India & Arunachal Pradesh pertaining to fruits, Vegetables, flowers, Spices & Mushroom and its cultural practices.

### 5. Propagations & Orchard Management: -

Fundamental/Principle/ methods of plant propagation of Horticultural crops, Layout of orchard, system of plant & method of cultivation, planning & Management of nurseries, scope & zone-wise growing of Horticultural crops pertaining to temperate, sub-temperate, tropical, sub-tropical, Definition, its scope and importance of green house and protection.

6. Plant Physiology: - Absorption of water, its movement in plant, factor affecting, photo respiration, evaporation, enzymes and enzymes activities in physiological process, stress at physiology by Horticulture crops with special reference to Arunachal conditions.

7. Genetic & Plant Breeding :- Elementary concept, principal of inheritance, interaction of gene, linkage crossing over, wild relation and resources of resistance to biotic, a biotic stresses and quality characters for fruit, vegetables, flower, plantation crops, Spices, medicinal and aromatic Horticulture crops. Breeding as modern science, classification of crops according to breeding behavior, application of breeding method.

8. Soil Science: - Composition of soil, soil texture, soil water, soil colloid, minerals, organic and their natures and protection, Concept of soil PH. Theories and concept of soil moisture, Characterization of soil by dramatic mobilization, organic matter, humus, its formation, preparation of CN ratio in soil, nitrification & its significance. Details of soil profile, Land capability, classification, soil survey. Different types of soil Micro-Organism, Soil texture evaluation methods and analysis.

### Paper-II.

#### 1). Plant Pathology. :-

- i). Concept of disease in plant, importance of plant disease, classification of plant disease, Various parasite and non-parasite, causes of plant disease, stages of disease development and their casual Organism.
- ii). Disease of fruit and plantation crops, its etiology, system of methods of spread, epidemiology of banana citrus, grape, apple, peach, walnut, pineapple, pear, kiwi and concept of integrated of control measure and their casual organism.
- iii). Disease of vegetable, tuber and spices crops, its etiology, epidemiology, method od spread and concept of integrated of control measure.
- iv). Disease of ornamental, medicinal and aromatic plants, its etiology and management of disease of major crops, Tube rose, Rose, jasmine etc.
- iv). Definition of weeds, menace in Horticultural crops, classification of weeds, its control measure, their application methods and biolgy control of weeds. Modern concept of organic biological cropping.