

ARUNACHAL PRADESH PUBLIC SERVICE COMMISSION

HORTICULTURE : PAPER – I

Time: 3 (Three) hours

Full marks: 100

(Group – A is compulsory. Attempt any FOUR questions from Group – B).

GROUP – A

(This Group is COMPULSORY)

Q. 1. Attempt any 10 (ten)

2x10=20

- a) Write the scope of cultivation of fruit crops in Arunachal Pradesh.
- b) Mention the maturity indices followed in apple, guava, cucumber and pumpkin.
- c) Discuss the branches of horticulture.
- d) Write components and ration of the ideal rooting medium of anthurium.
- e) State two commercially important varieties each of apple, Kiwi fruit, banana, cabbage, potato, brinjal, turmeric, ginger, rose and gladiolus.
- f) Write the pre-planting treatment of ginger and turmeric before planting.
- g) Discuss the curing and processing of black pepper.
- h) Mention the propagating materials used for propagation of pineapple, guava, anthurium and orchids.
- i) Name two types of marigold and differentiate them.
- j) State the disease that most commonly occurs in nursery bed of vegetable seedling and its control measure.
- k) Write the different methods of weed management in horticultural crop cultivation.
- l) Mention five aromatic plants and their uses.

GROUP – B

(Answer any Four.)

Q.2. Attempt any 8 (eight)

2.5x8 = 20

- a) Write the method of propagation of chrysanthemum.
- b) Write the suitable method of planting of fruit trees in hill slopes of Arunachal Pradesh.
- c) Narrate the storage procedure of gladiolus corm after harvesting.
- d) Explain the processing of turmeric after harvesting.
- e) Enumerate the production problems of cauliflower cultivation.
- f) State the different methods of asexual propagation.
- g) Write the different soil moisture conservation methods in orchard.
- h) What is 'fertigation' ? Write the advantage of it.
- i) Explain the rapid propagation of black pepper.
- j) Enlist any five important medicinal plants of your locality and enumerate their applications and scope of commercialization.

Q.3. Write short notes on any 5 (five) of the following

4x5 = 20

- a) Bahar treatment
- b) Classification of vegetables on the basis of parts used
- c) Scope of horticulture in Arunachal Pradesh
- d) Pinching and disbudding in flowers
- e) Crop rotation in vegetables
- f) Agro climatic zones of Arunachal Pradesh

Q.4. Differentiate the following (Any 5 (five))

4x5 = 20

- a) Sexual propagation and asexual propagation
- b) Monopodial and Sympodial orchids
- c) Poly house and green house
- d) Tropical climate and temperate climate for cultivation of horticultural crops
- e) Training and pruning of fruit crops
- f) Kew and queen varieties of pineapple

Q.5. Attempt any 4 (four)

5x4 = 20

- a) Write the steps of the seed bed preparation for sowing of vegetable seeds.
- b) What is grafting? Narrate the advantages and limitations of grafting.
- c) Write in brief the commercial method of propagation of mango or rose.
- d) Narrate the points to be considered in establishing a commercial nursery.
- e) Write the importance of shading net house in a commercial nursery.

Q.6. Attempt any 2 (two)

10x2 = 20

- a) What do you mean by high density planting (HDP) of fruit crops. How plants are kept dwarf in high density planting? Elaborate with suitable examples.
- b) Elaborate the scope, importance and production problems of cultivation of medicinal, aromatic and spices in Arunachal Pradesh.
- c) Write the complete package of practices of edible mushroom cultivation.

Q.7. If a youth wishes to cultivate commercially one of the fruit crops in 1 hectare of land in Arunachal Pradesh, which fruit crop you will suggest to select? Mention the reasons for selecting that particular fruit crop. Write your suggestions in relation to variety of the fruit crop to be grown, number of required planting materials to be planted in his field, planting season, planting distance, planting methods and other management practices till harvesting.

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Q.8. What are the probable causes of low productivity of citrus in North east region of India? Enumerate your suggestions to overcome the problems so as to increase the productivity of citrus.

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Q.9. Write briefly the package of practices for cultivation of any one of the following vegetable crops with special reference to soil, variety, planting time, spacing, fertilization and yield.

- a) Cabbage
- b) Okra
- c) Pumpkin

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