

ARUNACHAL PRADESH PUBLIC SERVICE COMMISSION

HORTICULTURE: PAPER – II

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) $10 \times 2 = 20$

- a) What is 'Exudation of a plant'? Write in short.
- b) Draw a distinction between 'Disease & Disorder'?
- c) 'Damping off' is a common disease in vegetable nursery. Write the causal organism and symptoms of the disease.
- d) State the major diseases with causal organisms of potato.
- e) What do you mean by 'Blindness and Whiptail' of cauliflower? Explain.
- f) What are the management practices will you suggest for control of Brinjal stem borer?
- g) Write a brief note on IPM.
- h) What are the major functions of Auxins?
- i) What do you mean by 'Factor of production'? List them.
- j) What is 'Double Entry Book keeping'? How it is helpful in commercial farming?
- k) Name the different types and system of soil tillage implements?
- l) What is the role of a rural psychologist?

GROUP - B

(Answer any Four.)

Q. 2. Attempt any 8 (eight) $8 \times 2.5 = 20$

- a) State the major diseases of minor fruit crops in your own words.
- b) Describe the control measures of weeds that commonly found in an orchard.
- c) Write down the management practices followed for controlling the menace of major pest of fruit crops.
- d) Explain the process of pre-harvest regulation of horticultural crops by usage of plant hormone
- e) Briefly discuss what you mean by 'learning process'?
- f) State the principles which influence the major farm management decisions.
- g) What are the different cost concepts used in farm Management?
- h) What are the major sources of farm power in Arunachal Pradesh?
- i) How do you see the significance of adopting organic farming in your region?
- j) Write a note on grading of fruits.

Q. 3. Write short notes on any 5 (five) of the following $5 \times 4 = 20$

- a) Horticultural and Physiological maturity

- b) Marketable surplus
- c) Energy plantation
- d) Programme evaluation
- e) IC Engines
- f) National income
- g) Vernalisation

Q. 4. Attempt any 4(four)

4 x 5=20

- a) State the importance of agro-forestry in reducing the environmental pollution.
- b) What practices will you suggest for preventing introduction and spreads of weeds?
- c) Describe the major components of Integrated Pest Management.
- d) What do the terms education, training and extension signify?
- e) What are the climatic factors which effect vegetable production? Briefly discuss.
- f) Name two common pests of Citrus and describe the methods of their control.

Q. 5. Attempt any 2 (two)

2 x 10=20

- a) What are the fungicides? How fungicides are classified on the basis of chemical nature.
- b) What is the difference between hormone and plant growth regulators? Write a brief note on their importance in Horticulture.
- c) What do you mean by the term surveying and leveling? Describe in your own about the role of surveying in orchard layout.

Q. 6.Explain any 4(four) of the following

4 x 5=20

- a) Law of diminishing returns
- b) Grading and standardization
- c) Farm mechanization
- d) Epidemiology of Banana
- e) Conditioning and pulsing in floriculture.

Q. 7 Attempt any 2(two)

2 x 10=20

- a) Illustrate the meaning of hardening and delaying ripening process. Describe the physiological and biochemical changes of fruits during ripening.
- b) What do you understand by shifting cultivation? How do you suggest for remedial and alternative of shifting cultivation for sustainable resource uses.
- c) State the importance of marketing. Discuss the constraints of marketing of Horticultural products in Arunachal Pradesh.

Q. 8. How flowering can be induced in pineapple artificially? Suggest some means by which harvesting of pineapple fruit can be continued for longer period to run a processing industry.

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Q. 9. How are the plant diseases classified on the basis of the symptoms? Cite one example for each. How you will suggest for the control and spread of Yellow mosaic vein of Okra in the field.

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Q. 10. Write down the problems and prospects of horticulture development in Arunachal in relation to soil and climate, marketing, processing, storage and transportation with special reference to pineapple.

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