DIPLOMA EXAMINATION, APRIL 2022

Second Semester

Horticulture

FRUIT CROPS PRODUCTION TECHNOLOGY

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

Answer all questions.

- 1. Organic mulch
- 2. Crop regulation
- 3. Viticulture
- 4. Hill banana varieties
- 5. Multi tier cropping system with mandarin
- 6. Acid lime varieties released from TNAU
- 7. Propagation in Apple
- 8. Value added products of pear
- 9. Pancha Kavya
- 10. Good Agricultural Practices

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Subtropical fruits grown in Tamilnadu.

Or

(b) Physical features of orchard.

	(b)	Harvesting in grapes.
13.	(a)	Propagation in Pineapple.
		Or
	(b)	Pollination in Avocado.
14.	(a)	Benefits of Good Agricultural Practices.
		Or
	(b)	Challenges in Good Agricultural Practices.
15.	(a)	Organic Certification.
		Or
	(b)	Insect Management in organic fruit production.
		Part C $(3 \times 10 = 30)$
		Answer all questions.
16.	(a)	Discuss in detail on the various PGR's and use of plant growth regulators in fruit crops.
		Or
	(b)	Discuss in detail on the important features of establishing an orchard.
17.	(a)	Discuss the production technology of Banana.
		Or
	(b)	Discuss the production technology of Guava.
		2 C-6880

12. (a) Alternate Bearing in Mango.

Or

18. (a) Discuss the organic fruit productions with standards and Certifying Agencies.

Or

(b) Discuss the production technology of Avocado.

DIPLOMA EXAMINATION, APRIL 2022

Second Semester

Horticulture

DRY LAND HORTICULTURE

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Expand CIAH and where it is located
- 2. Under exploited fruits
- 3. Umran
- 4. Varieties of Custard Apple
- 5. Uses of Bael
- 6. Spacing in wood apple
- 7. Alkaloid Present in periwinkle
- 8. Pusa Navbahar
- 9. Economic part of Vetiver
- 10. Scientific name of Senna

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Present Area and production of Dryland fruits in India and Tamilnadu.

 O_1

- (b) Dryland regions of India and Tamilnadu.
- 12. (a) Varieties of Aonla.

Or

- (b) Crop regulation in Pomegranate.
- 13. (a) Propagation in Bael.

Or

- (b) Uses of Jamun.
- 14. (a) Seed rate for Senna.

Or

- (b) Seed rate for cluster bean.
- 15. (a) Spacing in Vetiver.

Or

(b) Propagation in Palma Rosa.

Part C

 $(3\times10=30)$

Answer all questions.

16. (a) Discuss in detail on the production technology of custard apple.

Or

(b) Discuss in detail on the production technology of Pomegranate.

2

17. (a) Discuss in detail on the cultural practices followed in Jamun.

Or

- (b) Discuss in detail on the cultural practices followed in Manila tamarind.
- 18. (a) Discuss in detail the method of oil extraction in Palma Rosa.

Or

(b) Discuss in detail the production technology of vetiver.

98023

DIPLOMA EXAMINATION, APRIL 2022

Second Semester

Horticulture

BASICS OF ORNAMENTAL GARDENING AND LANDSCAPING

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define formal garden.
- 2. Give examples for two edge plants.
- 3. Name two plants suitable for topiary.
- 4. Name two flowering annuals.
- 5. Name two flowering trees suitable for avenue planting.
- 6. Name two climber plants.
- 7. Name two plants suitable for rockeries.
- 8. Name two lawn grases.
- 9. Name two palms.
- 10. Name two plants suitable for sunken garden.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Differentiate formal and informal gardens.

Or

- (b) Differentiate Arches and Pergolas.
- 12. (a) Write brief note on cacti and succulents with examples.

Or

- (b) What are the maintenance operations in residential complex garden?
- 13. (a) Write brief note on palms and cycads with example.

Or

- (b) Write in brief about institutional garden.
- 14. (a) List the maintenance operations followed in highways garden.

Or

- (b) What are the important features of airport gardens?
- 15. (a) List the maintenance problems in garden lawns.

Or

(b) Write brief note on important lawn grasses.

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Write in detail about the plant components of garden with suitable examples.

Or

(b) Write the importance of non-plant components of a garden.

- 17. (a) Describe about following special types of gardens
 - (i) Sunken garden and
 - (ii) Root garden.

Or

- (b) Write in detail about establishment and maintenance of Public gardens.
- 18. (a) Write in detail about establishment and maintenance of lawn.

Or

(b) Describe in detail about all maintenance operations pertaining to landscape gardening.

DIPLOMA EXAMINATION, APRIL 2022.

Second Semester

Horticulture

MEDICINAL AND AROMATIC CROPS PRODUCTION TECHNOLOGY

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Write the botanical name of glory lily.
- 2. Which part of medicinal coleus is medicinally useful.
- 3. How periwinkle is propagated?
- 4. Write the botanical name of senna.
- 5. How ashwagandha is propagated?
- 6. Write the Economically important part of kalmegh.
- 7. Write the essential oil content of lemon grass.
- 8. Write the medicinal uses of Aloe vera.
- 9. What is the economic part of vetiver plant.
- 10. How palmarosa is propagated?

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write about the propagation method and quantity of propagation material required for lae Glori lily.

Or

- (b) Write notes on harvesting and processing practices for periwinkle.
- 12. (a) What are the major medicinal plants grown in Tamilnadu.

Or

- (b) Define aromatic plants with examples.
- 13. (a) Write about the harvesting and processing practices of Aloevera.

Or

- (b) What are the inter cultural practices followed in Gymnema cultivation.
- 14. (a) Write the medicinal uses of stevia.

Or

- (b) How to extant essential oil from lemon grass.
- 15. (a) What are the processed products from vetiver?

Or

(b) Write short notes on soured and sweet basil.

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Write the scope and importance of medical plant cultivation in Tamilnadu.

Or

2

(b) Write in detail about the medicinal coleus cultivation.

17. (a) Write the cultivation practices of senna.

Or

- (b) Write the cultivation practices of Ashwagandha.
- 18. (a) Write the cultivation and processing practices of palmarosa.

Or

(b) Discuss in detail about the contract farming and good agricultural practices in medicinal plant production.

DIPLOMA EXAMINATION, APRIL 2022.

Second Semester

Horticulture

IRRIGATION AND WEED MANAGEMENT IN HORICULTURAL CROPS

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Write a critical stage of water requirement for brinjal.
- 2. Name an irrigation method suitable for transplanted vegetable crop.
- 3. Name the improved irrigation method suitable for fruit trees.
- 4. Name two dicot weeds.
- 5. Define weed.
- 6. Name one mechanical weed control method.
- 7. Name a post-emergence herbicide.
- 8. Name a herbicide suitable for use in coconut Orchard.
- 9. Name two most common weeds found in Orchards.
- 10. Name a parasitic weed found in fruit trees.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) How to improve water use efficiency?

Or

- (b) What are the major sources of irrigation.
- 12. (a) Write the critical stages of water requirement in major horticultural crops.

 $\bigcap_{\mathbf{r}}$

- (b) How to manage poor quality irrigation water?
- 13. (a) What are the merits and demerits of mechanical weed control methods?

Or

- (b) Write the importance of weed control in crop production.
- 14. (a) Classify the herbicides based on methods of application.

Or

- (b) Write a note on pre-emergence herbicide.
- 15. (a) Briefly write about aquatic weeds.

Or

(b) How to control parasitic weeds in fruit trees.

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Discuss in detail about improving water use efficiency and irrigation water use efficiency.

Or

(b) Discuss in detail about the irrigation methods and their advantages.

 2

17. (a) Write the advantages and demerits of different weed control methods.

Or

- (b) Discuss in detail about the weed management practices suitable for major horticultural crops.
- 18. (a) Discuss in detail about management of waste land weeds and problematic weeds.

Or

(b) Discuss in detail about the integrated weed management practices suitable for Orchards.

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Horticulture

VEGETABLE CROPS PRODUCTION TECHNOLOGY

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Heterostyly in brinjal
- 2. Capsaicin in chillies
- 3. Kitchen garden
- 4. Determinate tomato
- 5. Staking
- 6. Use of ethrel in cucurbits
- 7. Maturity indices of tuber crops.
- 8. Bolting in onion.
- 9. Indian and European types of cauliflower.
- 10. Hydroponics in vegetable cultivation.

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Scope and importance of vegetable cultivation.

Or

- (b) Classification of vegetables.
- 12. (a) Nursery management in vegetable crops.

Or

- (b) Nutrient management in vegetable crops.
- 13. (a) Physiological disorders of tomato.

Or

- (b) Nutrient deficiency in vegetable crops.
- 14. (a) Sex ratio manipulation in cucurbits.

Or

- (b) True potato seed.
- 15. (a) Annual Moringa and its description.

Or

(b) Amaranthus varieties.

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Production technology of tomato.

Or

(b) Production technology of bhendi.

C-8011

2

17. (a) Production technology of tapioca.

Or

- (b) Production technology of Carrot.
- 18. (a) Production technology of Cauliflower.

Or

(b) Production technology of moringa.

DIPLOMA EXAMINATION, NOVEMBER 2022.

Third Semester

Horticulture

FLOWER CROPS PRODUCTION TECHNOLOGY

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What are commercial flowers?
- 2. Write about the products of Rose?
- 3. How tuberose is propagated?
- 4. Explain the types of Marigold with industrial why?
- 5. Write about the propagation methods for carnation.
- 6. What are the types of chrysanthemum?
- 7. Explain Keikis.
- 8. Differentiate loose flowers with cut flowers.
- 9. What is a bouquet? How it is made?
- 10. What is grading in flowers?

Answer all questions.

11. (a) Write about the scope and importance of flower crops in India.

Or

- (b) Write about the species diversity in Jasmine.
- 12. (a) Explain the production technology for Crossandra.

Or

- (b) Write about the cultivation methods for Nerium.
- 13. (a) Describe the process of floral concrete extraction.

Or

- (b) Write the production technology for chrysanthemum under polyhouse.
- 14. (a) Write about the propagation and planting methods for Gladiolus.

Or

- (b) Write the production technology for Alstroemeria and Heliconia.
- 15. (a) Write about the preparation of bouquet.

Or

(b) How flowers are graded and Marketed?

2

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) What is protected cultivation? How it is advantageous to open field cultivation.

Or

- (b) Discuss the role of loose flowers in Tamil Nadu.
- 17. (a) Write about the production technology for Orchids.

Or

- (b) What is BOP? How it is cultivated?
- 18. (a) How Anthurium is cultivated? Explain in detail.

Or

(b) Write about the role of photoperiodism in chrysanthemum.

DIPLOMA EXAMINATION, NOVEMBER 2022.

Third Semester

Horticulture

SPICE CROPS PRODUCTION TECHNOLOGY

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Species of curcuma.
- 2. Plagiotrops shoot in pepper.
- 3. Seed propagation procedure in cardamom.
- 4. Planting material for turmeric.
- 5. Cinnamon species and their characteristics.
- 6. Commercial species of fenugreek.
- 7. Harvest index for Ginger.
- 8. Types of cardamom.
- 9. Top working in nutmeg.
- 10. Harvest index and time Harvest in clove.

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Classification of spices.

 O_1

- (b) Harvesting and processing of pepper.
- 12. (a) Different types of shoots in pepper.

Or

- (b) Harvesting and curing of cardamom.
- 13. (a) Harvesting and curing of Ginger.

Or

- (b) Propagation methods and nursery practices in clove.
- 14. (a) Propagation and nursery techniques in Nutmeg.

Or

- (b) Harvesting and processing of All spice.
- 15. (a) Harvesting and curing of coriander.

Or

(b) Good agricultural practices in spice production.

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Write in detail about scope and importance of spices industry in India.

Or

(b) Write in detail about Rapid multiplication techniques in pepper.

 2

17. (a) Explain about propagation methods and nursery techniques of cardamom.

Or

- (b) Write in detail about cultivation practices and processing of Turmeric.
- 18. (a) Write in detail about the cultivation practices of coriander.

Or

(b) Write in detail about the production technology of fennel and cumin.

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Horticulture

PESTS OF HORTICULTURAL CROPS AND THEIR MANAGEMENT

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Ladder scrapping.
- 2. Bt.
- 3. Pollu beetle.
- 4. Erenium on jasmine.
- 5. Vector.
- 6. Predator.
- 7. Anar butterfly.
- 8. Chemical control.
- 9. Fruit fly.
- 10. Sap feeder.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) List out various categories of pests with example.

Or

- (b) Write a brief account on role of natural enemies in pest suppression.
- 12. (a) Give the detailed account on management of fruit flies.

Or

- (b) List out various sap feeder of vegetable crops and their Management.
- 13. (a) Integrated pest management for coconut crop pests.

Or

- (b) Integrated pest management for phytophagous mites on various horticultural crops.
- 14. (a) Integrated pest management for mealybug on various horticultural crops.

Or

- (b) Integrated pest management for diamond back moth on cruciferous vegetables.
- 15. (a) Describe the damage caused by the pests of stored products and their management.

Or

(b) Enlist the IPM packages for polyhouse pests.

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) What is IPM? Give brief detail about various components.

Or

- (b) Explain the various reason for the cause of pest outbreak.
- 17. (a) List out the major pest of fruit crops and discuss about their management.

Or

- (b) List out the important borer pest of vegetable crops and their management.
- 18. (a) Illustrate the nematode pest of horticultural crops and their management.

Or

(b) Explain the special pest management strategies in ware house and polyhouse.

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Horticulture

DISEASES OF HORTICULTURAL CROPS AND THEIR MANAGEMENT

(2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Gummosis
- 2. Citrus canker
- 3. Total stem parasite
- 4. Koleroga
- 5. TSWV
- 6. Etiology mango malformation
- 7. Red rust in guava
- 8. Mouldy leaf spot of ber
- 9. Candle like appearance of conidia and conidiophore
- 10. What are fungicide?

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Describe the symptoms of Tanjore wilt in coconut and their management.

Or

- (b) Narrate the symptoms of quick wilt in pepper.
- 12. (a) How will you diagnose the following disease in the Orchard.
 - (i) Early blight of tomato
 - (ii) Yellow vein mosaic of okra
 - (iii) White rot bringal

Or

- (b) Compare between downy mildew and powdery mildew of grapes.
- 13. (a) Describe about powdery mildew in cucurbits.

Or

- (b) Write briefly about chilli anthracnose.
- 14. (a) Sketch out neatly about the phomopsis blight of brinjal.

Or

- (b) Give concrete recommendations for disease management in coffee plantations.
- 15. (a) Explain the method of fungicide application in disease management.

Or

(b) What is IPM? How it is used in plant Disease Management.

2

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Write down the disease of Mango, their symptoms, causal organism and integrated management practice to control the diseases.

Or

- (b) List out the important diseases of banana and explain their symptoms, causal organism and integrated management practices to control these Diseases.
- 17. (a) Write the symptoms, etiology epidemiology and management of brinjal Diseases.

Or

- (b) Explain the various diseases of Tomato and their Disease Management.
- 18. (a) Explain about the mushroom cultivation Procedure of Pleurotus and calocybe.

 O_1

(b) List out the Post harvest disease of fruit crops and explain its management practices.