# DIPLOMA EXAMINATION, APRIL 2023.

## **Fourth Semester**

## Horticulture

# PLANTATION CROPS PRODUCTION TECHNOLOGY

# (2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Explain fermentation in tea.
- 2. Define peaberry.
- 3. Rubber tapping.
- 4. Explain cocoa butter.
- 5. Types of branching in cashew.
- 6. Propagation of coconut.
- 7. Varieties of arecanut.
- 8. Oilpalm cultivars.
- 9. Processed products of palmyrah.
- 10. Training practices in tea.

		Part B	$(5 \times 5 = 25)$
		Answer all questions.	
11.	(a)	Propagation techniques of tea.	
		$\operatorname{Or}$	
	(b)	Propagation techniques of coffee.	

12. (a) Shade regulation in tea.

Or

- (b) Shade management in coffee.
- 13. (a) Types of shoots in cocoa.

Or

- (b) Propagation of cashew.
- 14. (a) Button shedding in coconut.

Or

- (b) Processing of arecanut.
- 15. (a) Oilpalm types of processing.

Or

(b) Processing of palmyrah.

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

Answer all questions.

16. (a) Production technology and processing of tea.

Or

(b) Production technology and processing of coffee.

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17. (a) Production technology and processing of cocoa.

Or

- (b) Production technology and processing of cashew nut.
- 18. (a) Production technology of oilpalm.

Or

(b) Production technology of coconut.

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# **DIPLOMA EXAMINATION, APRIL 2023**

# **Fourth Semester**

#### Horticulture

# SEED PRODUCTION TECHNOLOGY OF HORTICULTURAL CROPS

# (2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is an embryo?
- 2. What is polyembryoni?
- 3. What is hybrid?
- 4. Steps in Hybridization.
- 5. Stratification.
- 6. Isolation distance.
- 7. Roughing in seed production.
- 8. Steckling in cole crops
- 9. What is seed act?
- 10. What is seed testing?

Part B

 $(5 \times 5 = 25)$ 

## Answer all questions.

11. (a) Importance of seed.

Or

- (b) Difference between variety and hybrid.
- 12. (a) Pre and post harvest techniques in seed.

Or

- (b) Seed treatment techniques in horticultural crops.
- 13. (a) Steps involved in seed production.

Or

- (b) Steps involved in hybrid seed production.
- 14. (a) Types of seed dormancy with examples.

Or

- (b) Rules of seed act.
- 15. (a) Seed production in self pollinated crops.

Or

(b) Seed production in cross pollinated crops.

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

## Answer all questions.

16. (a) Write in detail about the seed production techniques of tomato.

Or

- (b) Write in detail about the seed production technology of Bitter gourd.
- 17. (a) Write in detailed account on seed production technology of cabbage.

Or

- (b) Write in detail about the seed production technology of coriander.
- 18. (a) Write in detail about the seed production technology of marigold.

Or

(b) Write in detail about the seed production technology of ashwagandha.

# **DIPLOMA EXAMINATION, APRIL 2023**

## Fourth Semester

#### Horticulture

# POST HARVEST HANDLING AND VALUE ADDITION OF HORTICULTURAL CROPS

# (2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is grading in fruits and vegetables.
- 2. What is Maturity indices?
- 3. Write about the use of wax in fruit preservation.
- 4. Define climacteric fruits with examples.
- 5. What is physiological maturity?
- 6. Define packaging.
- 7. What is cold chain?
- 8. Write about fermented beverages.
- 9. Define value addition with examples.
- 10. Expand and write about ZECC.

## Answer all questions

11. (a) What are reasons of post harvest losses of Horticultural crops.

Or

- (b) On the technologies for minimizing the losses.
- 12. (a) On the changes happening during fruit ripening.

Or

- (b) Role of chemicals in fruit ripening.
- 13. (a) On the packing materials used in Horticultural crops.

Or

- (b) On the factors affecting ripening of fruits.
- 14. On the steps involved in preparation of
  - (a) sauce

Or

- (b) Ketchup
- 15. (a) On the quality control standards of Horticultural crops.

Or

(b) Explain the Role of Government organisations in India for maintaining the quality standards of fruits and vegetables.

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Part C

 $(3 \times 10 = 30)$ 

Answer all the questions.

16. (a) Discuss in detail on the changes during fruit ripening.

Or

- (b) Write the scope and importance of PHT in Horticultural crops.
- 17. (a) Factors responsible for Deterioration of Harvested fruits and vegetables.

Or

- (b) Explain the factors responsible for the quality on post harvest life on horticultural crops.
- 18. (a) Appraise the recent technologies adopted extending the shelf life of flowers.

Or

(b) Write about the principles and methods of value addition in fruits and vegetables.

# DIPLOMA EXAMINATION, APRIL 2023.

## **Fourth Semester**

## Horticulture

# FARM MANAGEMENT AND MARKETING

# (2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Present value
- 2. Farm management
- 3. Partial budget
- 4. Farm planning
- 5. Risk
- 6. Uncertainty
- 7. Perfect competition
- 8. Demand
- 9. Grading
- 10. Market intelligence

Part B

 $(5 \times 5 = 25)$ 

Answer all questions.

11. (a) Law of Equi-marginal returns.

Or

- (b) Time comparison principle.
- 12. (a) Characteristics of a good farm plan.

Or

- (b) Types of farm budgets.
- 13. (a) Sources of risk and uncertainty.

Or

- (b) Methods of reducing risks.
- 14. (a) Classification of market structure.

Or

- (b) Characteristics of agricultural commodities.
- 15. (a) Role of regulated markets.

Or

(b) Importance of market information.

Part C

 $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain principle of factor substitution.

Or

(b) Explain in detail about principle of product substitution.

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17. (a) Write an essay on meaning and types of farm budget.

Or

- (b) Scope of agricultural marketing.
- 18. (a) Explain in detail about marketing functions.

Or

(b) Write an essay on cooperative marketing societies.

# **DIPLOMA EXAMINATION, APRIL 2023**

## **Fourth Semester**

## Horticulture

# FUNDAMENTALS OF EXTENSION EDUCATION

# (2020 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Define Agricultural extension.
- 2. Define Communication.
- 3. Define Diffusion.
- 4. Define Adoption.
- 5. Define Extension methods.
- 6. Define Audio visual aids.
- 7. Define farm journalism.
- 8. Define Internet.
- 9. Define farm and Home visit.
- 10. Define method demonstration.

Part B

 $(5 \times 5 = 25)$ 

## Answer all questions.

11. (a) Explain various principles of extension.

Or

- (b) Explain scope of agricultural extension.
- 12. (a) Enumerate the elements of teaching learning process.

Or

- (b) Enumerate the elements of communication.
- 13. (a) Explain various stages of adoption process.

Or

- (b) Explain barriers of communication.
- 14. (a) Write in detail about individual contact methods with the advantages and disadvantages.

Or

- (b) Explain farm publications.
- 15. (a) Explain Kissan call centre.

Or

(b) Write in detail about photography.

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

## Answer all questions.

16. (a) Explain in detail about various models of communication.

Or

- (b) Discuss in detail about adopter categories and their characteristics.
- 17. (a) Classify audio-visual aids and explain the criteria for selection of audio-visual aids.

Or

- (b) Explain in detail about mass contact methods.
- 18. (a) Discuss participatory rural appraisal techniques.

Or

(b) Discuss in detail about information and communication technology and its role in extension education.