

C-9015

Sub. Code

98141

DIPLOMA EXAMINATION, APRIL 2023.

Fourth Semester

Agriculture

DRY FARMING AND AGROFORESTRY

(2020 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Dry farming
2. Pre monsoon sowing
3. Silvipasture
4. Conservation tillage
5. Integrated Farming System
6. Counter Bunds
7. Farm ponds
8. Social Forestry
9. Wind breaks and Shelter beds
10. Multipurpose Tree.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about alternate land use systems in Tamil Nadu.

Or

- (b) Discuss in detail advantages and components of Integrated Farming Systems in Tamil Nadu.

12. (a) Write types of drought and their management.

Or

- (b) Write in detail about graded, bench terrace and contour stone wall.

13. (a) Discuss in detail classification and role forestry in India.

Or

- (b) What is forest? Write the advantages and constrains of Agro forestry.

14. (a) Write in detail about trees suitable for problem soils and their cultivation practice.

Or

- (b) Write the following home garden and alley cropping.

15. (a) Write the types waste land and their management. In dry land area.

Or

- (b) Write the cultivation practices of Neem and Bamboo.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss briefly about the significant and scope of dry farming in India.

Or

- (b) Write in detail about the effect of drought on crop production.

17. (a) Write in detail about classification of erosion and their management.

Or

- (b) Define forest and write in detail about the beneficial role of forest.

18. (a) Define Agro forestry? Write in detail about Agrisilviculture and silvipasture.

Or

- (b) Write in detail agro forestry trees suitable for pulp wood and match wood purpose.

C-9016

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98142

DIPLOMA EXAMINATION, APRIL 2023.

Fourth Semester

Agriculture

BREEDING OF FIELD CROPS

(2020 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Difference between protoandry and protogyny.
2. Explain mass selection
3. Differentiate tassel and cob
4. Explain about plant introduction
5. Elaborate pureline selection
6. Briefly explain about Johnson grass
7. Polyploidy breeding
8. Interspecific hybridization
9. Write a short note on CK60A
10. Define CGMS.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write progenitor of rice, its role in developing pest and disease resistant lines using backcross breeding method.

Or

- (b) Define multiline and its role in wheat improvement.
12. (a) Discuss about CMS source and breeding methods in cumbu.

Or

- (b) Discuss about development of inbreds and their role in hybrid production in maize.
13. (a) Elaborate breeding techniques in blackgram.

Or

- (b) Explain about the breeding techniques in groundnut.
14. (a) Briefly explain constraints and strategies for oil improvement in sesame with suitable breeding methods.

Or

- (b) Explain the breeding methods to improve oil content in castor.
15. (a) Discuss about the hybrid production and breeding strategies to improve copra yield in coconut.

Or

- (b) Importance of small millets and breeding methods available to increase the yield in small millets-discuss?

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the breeding approaches for yield and quality improvement in rice.

Or

- (b) Elaborate about different male sterility systems and their role in hybrid production with illustrations?

17. (a) Illustrate papilionaceous corolla and discuss the breeding strategies for yield improvement and hybrid seed production in redgram?

Or

- (b) Explain the breeding methodologies for oil improvement in sunflower.

18. (a) Discuss in detail about the TSS and its improvement using various breeding techniques in sugarcane.

Or

- (b) Explain about the breeding methods to improve fodder yield in forage crops.

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DIPLOMA EXAMINATION, APRIL 2023.

Fourth Semester

Agriculture

SEED PRODUCTION TECHNIQUES IN FIELD CROPS

(2020 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Write a short note on Importance of quality seeds in crop production.
2. Write about seed multiplication ratio with examples.
3. Give a short note about guidelines for seed production
4. Write about the role of insects in Seed production.
5. Write about visible symptoms of physiological maturity for brinjal and Snakegourd.
6. Write about the tool of hybrid seed production in tomato.
7. Write about Harrington's thumb rule of storage.
8. Write about sequences of seed processing
9. Write about field inspection for seed certification.
10. Briefly explain about seed village concepts.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Define seed multiplication ratio and differentiate seed and grain.

Or

- (b) Differentiate varietal seed production and hybrid seed production.

12. (a) Write about supplementary pollination with examples.

Or

- (b) Write about seed enhancement techniques followed in cotton.

13. (a) Write about various seed extraction methods followed in vegetables.

Or

- (b) Write about emasculation and dusting procedures followed in tomato.

14. (a) Define seed packaging and explain about types of containers with examples.

Or

- (b) Write about principles of different upgrading processing machine.

15. (a) Define seed marketing and factors influencing seed marketing.

Or

- (b) Briefly explain about duties and responsibilities of seed inspector.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about generation system of seed multiplication and various classes of a seeds.

Or

- (b) Explain in detail about characteristics of good quality seeds.

17. (a) Write in detail about seed production techniques in rice.

Or

- (b) Write in detail about hybrid seed production techniques in cotton.

18. (a) Explain in detail about the salient features of seed act.

Or

- (b) Explain in detail about procedure for seed certification.

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98145

DIPLOMA EXAMINATION, APRIL 2023.

Fourth Semester

Agriculture

**EXTENSION EDUCATION AND TRANSFER OF
TECHNOLOGY**

(2020 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Extension Education
2. Method demonstration
3. Communication
4. Training
5. FPO
6. Rural sociology
7. Leader
8. Social change
9. E extension
10. Adoption

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write in details about the individual contact method.

Or

- (b) Give in brief about Extension teaching methods.

12. (a) Enumerate the Principles of programme planning.

Or

- (b) Explain in detail about the Elements of communication.

13. (a) Explain the functions and role of ATMA.

Or

- (b) Write in detail about the objectives, organizational structure and functions of KVK.

14. (a) Types of leader and characteristics.

Or

- (b) Explain in detail about the Community development programme.

15. (a) Consequences of Adoption.

Or

- (b) Motivation and functions of motivation

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the role of Panchayat raj institutions in rural development.

Or

- (b) List out the rural and urban differences in rural sociology.

17. (a) Briefly explain about the different models of communication.

Or

(b) Explain in detail about the mass contact methods in transferring information.

18. (a) Explain in detail about the adopter categories along with their characteristics.

Or

(b) Explain in detail about the PRA with the tools used in disseminating information.

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98144

DIPLOMA EXAMINATION, APRIL 2023.

Fourth Semester

Agriculture

**FLORICULTURE, MEDICINAL PLANTS, SPICES AND
PLANTATION CROPS**

(2020 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. Pruning
2. Define bulb dormancy
3. Define formal style of garden with an example
4. Bonsai
5. Describe medicinal uses of coleus
6. Name the alkaloids present in ocimum.
7. Mulching
8. Write the uses of fenugreek
9. Pulping of coffee
10. Cashew shelling

Part B

(5 × 5 = 25)

Answer **all** the questions.

11. (a) Write the harvesting, post harvest handling in tuberose.

Or

- (b) Write the different methods followed in essential oil extraction.

12. (a) Write the importance and uses of annuals in landscaping.

Or

- (b) Write the different methods followed for preserving flowers and foliage in dry flower decoration.

13. (a) Describe medicinal uses, harvesting and grading of ashwagandha.

Or

- (b) Write the important intercultural operations followed in glory lily.

14. (a) Harvesting and processing of ginger.

Or

- (b) Commercial method of propagation followed in tamarind.

15. (a) Top working in cashew.

Or

- (b) Training and pruning in cocoa.

Part C

(3 × 10 = 30)

Answer **all** the questions.

16. (a) Enumerate the production technology of marigold.

Or

- (b) Write in detail about the different methods of lawn making and its maintenance.

17. (a) Explain the production technology of Phyllanthus.

Or

- (b) Explain the production technology of cinnamon.

18. (a) Write in detail about value added spice products.

Or

- (b) Enumerate different propagation methods and planting systems followed in rubber.
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