C–1109	Sub. Code
	98131

DIPLOMA EXAMINATION, NOVEMBER 2023

Third Semester

Agriculture

AGRONOMY OF FIELD CROPS – II

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Brief about biofuel.
2. Explain about role of sugarcane in Indian economy.
3. Earthing up in groundnut?
4. Brief about irrigation management in tobacco.
5. Give a short note about silage.
6. What are forage crops?
7. What are the special features of sesame?
8. Mention any four green leaf manures
9. Brief about nipping in cotton.
10. Mention the varieties of sunflower

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

Answer **all** questions.

11. (a) Importance of oilseeds-discuss.

Or

(b) Seed treatment techniques in oilseeds – Discuss.

12. (a) Explain about advantages of green manures.

Or

(b) Write in detail about weed and nutrient management in sugar beet.

13. (a) Field preparation and seed treatment in sunflower-Discuss.

Or

(b) Suggest a cropping system suitable for cowpea.

14. (a) SSI in sugarcane — Discuss.

Or

(b) Enumerate fodder crops scenario in India.

15. (a) Intercultural operations in Kolukattai grass - Discuss.

Or

(b) Give a brief note about irrigation management in Pungam and subabul.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss in detail the agronomic package of practices for Lucerne and berseem.

Or

(b) Discuss in detail the agronomic package of practices for productivity enhancement sugarcane.

17. (a) Explain the reasons for low productivity of oilseeds in India and method to increase the productivity of oilseeds.

Or

(b) Discuss about sunflower cultivation practices.

18. (a) Write about the agronomic package of practices for glyricidia and Pungam?

Or

(b) Discuss in detail the agronomic package of practices for productivity enhancement of elephant grass and desmanthus.

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C–1110	Sub. Code
	98132

DIPLOMA EXAMINATION, NOVEMBER 2023

Third Semester

Agriculture

CROP PESTS AND THEIR MANAGEMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Silveryshoot

2. Dead heart

3. Red gram sterility mosaic

4. Trap crop

5. Rosette flowers

6. Little leaf

7. Defoliators

8. Seasonal pests

9. Parasitoids

10. Attractants.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Biology and management of rice stem borer.

Or

(b) Pod Borer complex in Pulses and their management.

12. (a) Integrated pest management for Red hairy caterpillar in Groundnut.

Or

(b) Biology and management of brinjal shoot and fruit borer.

13. (a) Biology and Management of Diamond back moth.

Or

(b) IPM for tobacco caterpillar

14. (a) Describe symptoms of damage and management of rhinoceros beetle.

Or

(b) Biology and management of stem borer in coffee.

15. (a) Enlist the major pests of rose and their management.

Or

(b) IPM for fruit sucking moth.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Enlist of major sucking pests of rice and write their systematic position, biology, symptoms and their management.

Or

(b) Pod borer complex in pulses and write their systematic position, biology, symptoms and their management.

17. (a) Describe the systematic position, biology, symptoms, and management of the major pest in brinjal.

Or

(b) Discuss the key pests of flower crops and describe their systematic position, biology, symptoms, and control in detail.

18. (a) Explain the key pests of mango and their management.

Or

(b) Explain the major pests of stored products and their management.

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C–1111	Sub. Code
	98133

DIPLOMA EXAMINATION, NOVEMBER 2023

Third Semester

Agriculture

CROP DISEASES AND THEIR MANAGEMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define sheath blight of rice.
2. Define downy mildew of sorghum.
3. Write about Cumbu sugary disease.
4. Define chilli leaf curl virus.
5. Describe Redgram sterility mosaic.
6. Describe Tanjore wilt.
7. Describe Sunflower head rot.
8. Describe early tikka disease of Groundnut.
9. Describe Cotton verticillium wilt.
10. Describe damping off of tomato.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Briefly explain the symptoms and causal organism of various smut disease in cumbu and give suitable management.

Or

(b) Briefly explain the symptoms of brown spot disease of rice and briefly explain the disease management of grain discoloration of rice.

12. (a) Write briefly about the symptoms of cotto verticillium wilt and write their management practices?

Or

(b) Write briefly about the symptoms of sunflower Alternaria leaf blight and their management practices?

13. (a) Write briefly about mango malformation and their management?

Or

(b) Write detail about symptoms of Tanjore wilt and write the suitable integrated disease management of Tanjore wilt?

14. (a) Write detailed symptoms of papaya powdery mildew with suitable integrated disease management?

Or

(b) Describe the symptoms of Fusarium wilt of cotton with suitable disease management.

15. (a) Describe the symptoms of bunchy top of banana with suitable integrated disease management.

Or

(b) Write the blister blight and red rust of tea and give the suitable integrated disease management.

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

Answer **all** questions.

16. (a) List out the diseases in rice and Briefly explain the symptoms of grain discoloration with a neat diagram and state their management.

Or

(b) List out the diseases in banana and Briefly explain the symptoms of banana bunchy top virus with a neat diagram and briefly explain the disease management.

17. (a) Write briefly about the symptoms of coffee leaf rust and its management practices.

Or

(b) Write briefly about the symptoms mahali disease of arecanut and their management practices.

18. (a) Write the symptoms and management of quick wilt of pepper and chilli fruit rot disease

Or

(b) List out the diseases in sugarcane and briefly explain the symptoms of red rot with a neat diagram and briefly explain the disease management.

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C–1112	Sub. Code
	98134

DIPLOMA EXAMINATION, NOVEMBER 2023

Third Semester

Agriculture

METHODS OF PLANT BREEDING

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. What do you know about inbred?
2. Discuss about photosynthesis.
3. Define respiration and transpiration.
4. Explain about self in-compatibility.
5. Define male sterility.
6. Briefly explain about mass selection?
7. Germplasm conservation.
8. Plant tissue culture.
9. Write a short note on meristem culture.
10. Define mutation breeding.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write about modes of reproduction in plants.

Or

(b) Discuss about the significance of photosynthesis and respiration in plants.

12. (a) Plant introduction, its features, procedure, merits and demerits – Discuss.

Or

(b) What is self incompatibility? Discuss its types and utilization in crop breeding.

13. (a) Elaborate about in-situ and ex-situ conservation. Write about the advantages and disadvantages.

Or

(b) Explain about the mass selection with its limitations and utilization in crop improvement.

14. (a) Briefly explain about the procedure for development of hybrid varieties.

Or

(b) Importance of clonal selection in crop improvement– Discuss.

15. (a) Discuss about the clonal selection in vegetatively propagated plants.

Or

(b) Discuss about the importance of plant tissue culture for crop improvement.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain the mechanisms promoting self and cross pollination in crop plants.

Or

(b) Elaborate about CGMS and their role in hybrid production with illustrations.

17. (a) Define backcross breeding and elaborate its procedure, features, merits and demerits for crop improvement.

Or

(b) Role of Heterosis and its types, merits and demerits in crop improvement – Explain.

18. (a) Discuss about ploidy breeding with its merits and demerits for crop improvement.

Or

(b) Explain about the importance of meristem culture in producing virus free plants with advantages and limitations.

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C–1113

Sub. Code
98135

DIPLOMA EXAMINATION, NOVEMBER 2023

Third Semester

Agriculture

AGRICULTURAL ECONOMICS, FINANCE AND MARKETING

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Agricultural Economics

2. Macro Economics

3. Price index

4. Flow resource

5. Peasant farming

6. Fixed cost

7. Agricultural Risk

8. Agricultural Insurance

9. MSP

10. Facilitative functions of Marketing.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Law of supply and factors affecting Supply.

Or

(b) Define Inflation and its types.

12. (a) Write farm Management Decision.

Or

(b) Write in detail about Co-operative Movements in India.

13. (a) Write the Functions of RRB.

Or

(b) Functions of Private Money Lenders.

14. (a) Scope of Agricultural Marketing. Write in detail.

Or

(b) Write the types and functions of money.

15. (a) Write Producer Surplus in detail.

Or

(b) Explain the Price Policy in India.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Write Essay on Demand, Law of Demand and its types in detail.

Or

(b) Explain the cost concepts with diagrammatic representation.

17. (a) Explain Agricultural finance and Classification of Credit.

Or

(b) Explain Agricultural marketing and classification, of Market.

18. (a) Write in detail about functions and objectives of PMFBY.

Or

(b) Explain the concepts in Price spread, different marketing channels.

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