C–8016	Sub. Code
	98111

DIPLOMA EXAMINATION, NOVEMBER 2022.

First Semester

Agriculture

PRINCIPLES OF AGRONOMY AND AGRICULTURAL METEOROLOGY

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Agriculture
2. Green revolution
3. EFYM
4. Fertigation
5. Mulching
6. Sciophytes
7. Rainy day
8. Isobar
9. Bulky organic manure
10. Organic farming

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain in detail about branches of Agriculture.

Or

(b) Briefly explain the agronomic classification of crops with suitable example.

12. (a) Briefly explain the various factors affecting weather and climate.

Or

(b) Discuss different methods of sowing with their merits and demerits.

13. (a) Define seed treatment. Discuss different seed treatment techniques.

Or

(b) Discuss why optimum plant population and ideal crop geometry are necessary, what are the factors influencing them?

14. (a) Discuss the various methods of fertilizer application in detail.

Or

(b) Define and narrate the integrated weed? management strategies.

15. (a) Effect of wind velocity on crops and means to mitigate them.

Or

(b) Describe the monsoons of Tamil Nadu.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss in detail on importance and scope of agriculture in India.

Or

(b) Explain in detail about the factors affecting crop production.

17. (a) Enumerate the different methods of irrigation. Discuss about drip and sprinkler irrigation with their merits and demerits.

Or

(b) Discuss types of tillage that you have studied.

18. (a) Explain some of the low-cost post-harvest Technologies suitable for small farmers.

Or

(b) Explain the need of agroclimatic classification and mention the salient features of various zones of Tamil Nadu.

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C–8017	Sub. Code
	98112

DIPLOMA EXAMINATION, NOVEMBER 2022.

First Semester

Agriculture

IRRIGATION AND WEED MANAGEMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Field capacity
2. Permanent wilting point
3. Micro Irrigation
4. Critical crop weed competition
5. Weeds
6. Soil moisture constant
7. Herbicide formulation
8. Parasitic weeds
9. Crop water requirement
10. Water use efficiency

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Role of water in plant growth and development.

Or

(b) Factors affecting water requirement of the crops.

12. (a) Methods of herbicide application.

Or

(b) Illustrate preventive weed control measures.

13. (a) Explain about Integrated weed management.

Or

(b) What is sprinkler irrigation system? Explain its components.

14. (a) Classification of weeds.

Or

(b) Weed management practices for problematic weeds.

15. (a) Integrated weed management practices for pulses.

Or

(b) Allelopathic effects of weeds and crops.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss water management for oil seeds crops.

Or

(b) Write in detail about surface and sub surface irrigation methods.

17. (a) Illustrate quality of irrigation water.

Or

(b) Weed management for striga and loranthus.

18. (a) Discuss about cultural methods of weed control.

Or

(b) Briefly explain about different methods of weed control.

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C–8018	Sub. Code
	98113

DIPLOMA EXAMINATION, NOVEMBER 2022.

First Semester

Agriculture

BASICS OF SOIL SCIENCE

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Major components of soil.

2. Description of soil colour.

3. Soil colloids.

4. Ammonification.

5. Genesis and properties of saline soil.

6. Density of soil.

7. Soil water.

8. Importance of ion exchange reactions in soil.

9. Fluffy paddy soils.

10. SAR.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Give a detailed account on soil air.

Or

(b) Furnish an account of soil structure and its classification.

12. (a) Enumerate the methods for estimating soil moisture content.

Or

(b) Describe the role and functions of organic matter in soil.

13. (a) Define CEC. Write the factors influencing CEC reactions in soil.

Or

(b) Describe the nitrogen cycle.

14. (a) What are soil physical constraints? List them. Explain any two in detail and suggest management measures for each.

Or

(b) Briefly explain the chemical constraints in soil with their reclamation procedures.

15. (a) Discuss in detail the management of poor quality irrigation water in agriculture.

Or

(b) Discuss in detail different quality indices of irrigation water.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Detailed discussion about the significance of soil physical properties on the plant growth.

Or

(b) Write the factors influencing ion exchange reactions and its significance in soil.

17. (a) Write the significance of soil temperature measurement and management on plant growth.

Or

(b) Give an account on the constants of soil water and the factors affecting the movement.

18. (a) What are soil physical constraints? List them. Explain in detail and suggest management measures for each.

Or

(b) Discuss the irrigation water quality standards and write the factors affecting the suitability for irrigation.

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C–8019	Sub. Code
	98114

DIPLOMA EXAMINATION, NOVEMBER 2022.

First Semester

Agriculture

BASIC AND APPLIED MICROBIOLOGY

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. Morphology of bacteria.

2. Heterocyst's with an example.

3. Write the shorts on phosphorus solubilising microorganisms.

4. Write different carriers used for biofertilizer production.

5. Write the short notes on soil organic matter.

6. List Thermophilic group of microorganisms in composting.

7. Trichoderma

8. Method of application of biocontrol agent.

9. Types of cheese.

10. Probiotics

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Difference between Prokaryotes and Eukaryotes.

Or

(b) Write in detail about biofertilizers and its types.

12. (a) Discuss about the industrial production of vinegar.

Or

(b) Mass production of Blue Green Algae and their merits and demerits.

13. (a) Discuss about the Humus formation.

Or

(b) Write in briefly about mass production of *Pseudomonas*.

14. (a) Write the details about factors influencing composting.

Or

(b) Different types of biocontrol agents.

15. (a) Write in details about fermented dairy product.

Or

(b) Write the details about shelf life and storage of biocontrol agents.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss the role of microbes in Agriculture and industry.

Or

(b) Write an essay mass production of AM fungi.

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

Or

(b) Write in detail about Mass Production of Trichoderma.

18. (a) Give an account on the different types of fermenter.

Or

(b) Discuss on strain improvement of industrially important microorganisms

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C–8020	Sub. Code
	98115

DIPLOMA EXAMINATION, NOVEMBER 2022.

First Semester

Agriculture

FARM MACHINERY AND POST HARVEST PROCESSING

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define dehusking?
2. Explain the term polishing.
3. What is winnowing?
4. List out any two dryer.
5. Define harvesting.
6. How do we define dusters?
7. Explain leveler.
8. How do we explain planters?
9. Define harrowing.
10. Explain petrol engine.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about types of IC engine and write its components.

Or

(b) Compare petrol engine along with diesel engine.

12. (a) Discuss the role of power tiller in land preparation.

Or

(b) Write in detail about the seed metering mechanism.

13. (a) Discuss the working principle of submersible pumps with neat diagram.

Or

(b) Discuss different types of dusters along with uses.

14. (a) Define winnowing and write the working principle of manual and power operated winnowers.

Or

(b) Discuss different methods used to find out moisture content of grains.

15. (a) Discuss construction and working principle of pulse milling equipments.

Or

(b) Explain the oil extraction methods used for oil seeds.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss the working principle of secondary tillage implements with diagram.

Or

(b) Explain the components and functions of seed cum fertilizer drill.

17. (a) Discuss various implements used for intercultural operations with neat diagram.

Or

(b) Explain different threshers used for different crops with suitable diagram.

18. (a) Discuss in detail how could we utilize various wasters and by products of cereals.

Or

(b) Explain quantitative and qualitative losses of agricultural produces.

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C–6890	Sub. Code 98121

DIPLOMA EXAMINATION, APRIL 2022.

Second Semester

Agriculture

AGRONOMY OF FIELD CROPS – I

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Wet nursery preparation method – Explain.
2. Classification of maize.
3. Define Seed treatment and its merits – Discuss.
4. What is mean by Sorghum poisoning?
5. Ragi nursery production technology – Give a brief note.
6. List out five minor millets with its botanical name.
7. Critical stage for Kudiravali and Varagu?
8. List out the growth stages for Sweet Sorghum.
9. List out any two leading varieties for major pulse crops.
10. Define cropping system and give one suitable example for cereals.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Give a brief answer on types of rice cultivation.

Or

(b) Explain about SRI.

12. (a) Rainfed wheat cultivation – Explain.

Or

(b) Irrigated maize package of practice – Explain.

13. (a) Brief about package of practices of rainfed Sorghum.

Or

(b) Give a short notes on irrigated ragi cultivation practices.

14. (a) Scope and importance of minor millets in India – Discuss.

Or

(b) List out the critical stages for minor millets.

15. (a) Land preparation, skill and climatic requirement for religious – Discuss.

Or

(b) Explain about management practices in pulses.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Give a detailed note on agronomic practices for direct seeded rice.

Or

(b) Explain about different rice cultivation methods.

17. (a) Explain in detail about package of practices for Samai.

Or

(b) Food and nutritional security through cultivating minor millets – Explain.

18. (a) Package of practices for rice follow blackgram – Explain.

Or

(b) Package of practices for soybean – Explain.

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C–6891	Sub. Code
	98122

DIPLOMA EXAMINATION, APRIL 2022

Second Semester

Agriculture

GENERAL AND ECONOMIC ENTOMOLOGY

(2020 Onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Hamulate wing coupling.

2. Define Arolium.

3. Define Catkin.

4. Define Queen super sedure.

5. Define EIL.

6. Define Rogue spacing in paddy.

7. Define Rodenticide.

8. Define systemic poison.

9. Define Emulsifiable concentrate.

10. Define pheromone.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Enumerate the characters of the insects.

Or

(b) Discuss in detail about biting and chewing, and piercing and sucking type of mouthparts.

12. (a) List out the steps involved in late age rearing of mulberry silk worm.

Or

(b) Discuss in detail about castes of bees and their duties.

13. (a) Describe categories of pests with examples.

Or

(b) List out important predator and parasitoid families with examples.

14. (a) Describe ideal qualities of pesticide.

Or

(b) Classify insecticides based on mode of action.

15. (a) Enumerate various pesticide application methods.

Or

(b) Role of pheromones in pest management - Discuss.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about insect leg and its modifications with suitable examples and diagrams.

Or

(b) Elaborate on mulberry cultivation.

17. (a) Discuss in detail about 3R's of pesticide use.

Or

(b) Classify appliances used for pesticide applications and write in detail about power sprayer and duster.

18. (a) Explain in detail about HPR and mechanical control options.

Or

(b) Classify pesticides based on targets organisms and mode of entry.

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C–6892	Sub. Code
	98123

DIPLOMA IN AGRICULTURE EXAMINATION,
APRIL 2022

Second Semester

PRINCIPLES OF PLANT PATHOLOGY

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write about types of fungal spores.

2. Write about fruiting bodies of bacteria.

3. Define slurry treatment.

4. Define vertical resistance.

5. Define bed spawn.

6. Write about bed preparation in mushroom cultivation.

7. Bordeaux mixture.

8. Cheshnut compound.

9. Hot water seed treatment.

10. Seedling root dip method.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Elaborate on structure, movement and transmission of viruses.

Or

(b) Discuss about the structure and transmission of phytoplasma.

12. (a) Explain in detail about the role of exclusion in disease management.

Or

(b) Discuss about survey and assessment in disease surveillance.

13. (a) Write notes on copper fungicides.

Or

(b) List out important characters of ideal fungicide.

14. (a) Discuss about inorganic sulphur fungicides.

Or

(b) Briefly explain about precautions to be followed in fungicide use.

15. (a) Enumerate various steps in oyster mushroom cultivation.

Or

(b) Discuss in detail about nutritional value of mushroom.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Elaborate on symptoms of bacterial diseases.

Or

(b) Discuss in detail about the role of weathers factors in disease out break.

17. (a) Elaborate on symptoms of viral diseases.

Or

(b) Explain various forecasting methods and forecasting models in detail.

18. (a) Discuss about cultural methods of disease management with suitable examples.

Or

(b) Explain the specific application methods of biofungicides with examples.

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C–6893	Sub. Code
	98124

DIPLOMA IN AGRICULTURE EXAMINATION, APRIL 2022

Second Semester

ENERGY AND ENVIRONMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Name two sources of renewable energy.

2. Name the factors that cause global warming.

3. Write two merits of solar energy.

4. What is bio-gas?

5. Define ecosystem.

6. Define pollution.

7. Name two biotic components of ecosystem.

8. Name two sources of water pollution.

9. Write two examples for air pollutants.

10. Name three 'R's of solid waste management concept.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) What are the merits and limitations of wind energy?

Or

(b) Write brief note on solar photovoltaic system.

12. (a) Write about different types of bio-gas plants.

Or

(b) Write the importance of gasifiers.

13. (a) Differentiate biotic and abiotic components of the ecosystem.

Or

(b) Write brief note about water pollution.

14. (a) Briefly write about global warming.

Or

(b) What are the causes of acid rain?

15. (a) How to control noise pollution?

Or

(b) What is composting?

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) What are the major renewable energy sources? Write in detail about any one renewable energy sources?

Or

(b) Write in detail about the bio gas plants.

17. (a) Write in detail about the management measures to control environmental pollution.

Or

(b) What are the impacts soil pollution and how to manage soil pollution?

18. (a) Discuss about the eco friendly technologies followed in Agriculture.

Or

(b) Discuss about the best solid waste management options.

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C–6894	Sub. Code
	98125

DIPLOMA IN AGRICULTURE EXAMINATION, APRIL 2022

Second Semester

SOIL NUTRIENT MANAGEMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define primary nutrient.

2. Role of Nitrogen in plant growth and development.

3. What you know about secondary nutrients?

4. How do you identify nutrient deficiency in plants?

5. What is difference between secondary and micro nutrients?

6. Define manures?

7. Give a short account about complex fertilizers.

8. What is Biofertilizer with example?

9. What are the main sources of biofertilizers?

10. Define IPNS.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Give a brief account about soil fertility and soil productivity.

Or

(b) How do you identify nutrient deficiency in plants?

12. (a) Classification of manures.

Or

(b) Briefly explain about the deficiency symptoms and correction measures of primary nutrients.

13. (a) Brief about concentrated organic manures and its uses.

Or

(b) Classify the fertilizers based on the nutrient forms.

14. (a) What you understand about water soluble fertilizers?

Or

(b) Explain mixed fertilizers and its uses in crop production.

15. (a) Based on the soil test how you can give your recommendation to enhance soil fertility and crop productivity?

Or

(b) Soil fertility evaluation methods – explain.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) What are the nutrient composition and significance of organic manures – Discuss?

Or

(b) Discuss about the functions, deficiency symptoms and correction measures of micronutrients in plants.

17. (a) Explain in detail about the methods of application of biofertilizers and its types.

Or

(b) Discuss about the fixation and losses of nitrogen behaviour in soil.

18. (a) What you know about INM? How INM practices is more sustainable? Discuss.

Or

(b) Explain about the techniques involved to enhance the nutrient use efficiency of chemical fertilizers.

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C–6895	Sub. Code
	98126

DIPLOMA IN AGRICULTURE EXAMINATION, APRIL 2022

Second Semester

VEGETABLE AND FRUIT CULTURE

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Composition of nutrients in fruits.

2. Kitchen garden.

3. Transplanting in vegetable crops.

4. Yellow vein mosaic in Bhendi.

5. Spacing in cucurbits.

6. Cole crops.

7. Mango spacing in normal cultivation and HDP.

8. Harvest indices of Sapota.

9. Improved varieties of Aonla.

10. Propagation in Apple.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Distinguish between Determinate and Indeterminate types of Tomato.

Or

(b) Use of plant growth regulators in Chillies.

12. (a) Different species in Amaranthus.

Or

(b) Distinguish between Annual and perrinial moringa.

13. (a) Training and pruning in fruit crops.

Or

(b) Training and pruning in grapes.

14. (a) Importance of vegetable production.

Or

(b) Importance of fruit production.

15. (a) Propagation in Pine apple.

Or

(b) Propagation in Jack.

Part C (3 × 10 = 30)

Answer **all** questions.

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

Or

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

17. (a) Discuss in detail on the physiological disorders of important vegetable crops.

Or

(b) Discuss in detail on the physiological disorders of major fruit crops.

18. (a) Discuss in detail on the cultural practices of Papaya.

Or

(b) Discuss in detail on the cultural practices of Annona.

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C–6918	Sub. Code
	98127

DIPLOMA EXAMINATION, APRIL 2022

Second Semester

Agriculture

FUNDAMENTALS OF LIVESTOCK AND POULTRY MANAGEMENT

(2020 onwards)

Duration: 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define heifer.

2. Differentiate between mutton and chevon.

3. Define artificial insemination.

4. What is balanced ratios?

5. Define tethering.

6. Describe creep feeding.

7. Define swill feeding.

8. What is weaning?

9. Define Broiler.

10. What is deep litter system?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Advantages of integrated farming system.

Or

(b) Latest livestock and poultry census of TN.

12. (a) Factors to be considered while selecting a site for starting a dairy farm.

Or

(b) Importance of green fodder.

13. (a) Different systems of goat rearing.

Or

(b) Different types of housing for sheep rearing.

14. (a) Preventive measures for piglet anemia.

Or

(b) Control measures for Foot and Mouth disease in pigs.

15. (a) Composition of Broiler ratios.

Or

(b) Composition of Layer ratios.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about the importance of livestock and poultry in agriculture.

Or

(b) Write an essay on the care and management of newly born calves.

17. (a) Describe in detail about important breeds of sheep and goat.

Or

(b) Write an essay on care and management of newborn piglets.

18. (a) Narrate various prevention and control measures for Ranikhet disease and coccidiosis in poultry.

Or

(b) Explain in detail about cage and deeplitter systems of poultry housing.

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C–8028	Sub. Code
	98131

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Agriculture

AGRONOMY OF FIELD CROPS - II

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. Brief about seed treatment techniques in groundnut?

2. Explain about manganese deficiency in sesame?

3. Mention the specialty of sunflower oil?

4. Brief about weed management in castor?

5. Give a short note about acid delinting of cotton?

6. Write some ruling varieties of sugarcane?

7. Say something about the economic importance of tobacco?

8. Write about the harvesting of tropical sugar beet?

9. Why jatropha cultivation is more important in the Indian Economy?

10. Mention some Intercultural operations of forage crops?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Integrated nutrient management in groundnut-discuss?

Or

(b) INM in sesame — Discuss.

12. (a) Growth stages of sugarcane?

Or

(b) Growth stages of tropical sugarbeet?

13. (a) Oil seed-based cropping system?

Or

(b) Explain fodder preservation techniques.

14. (a) Intercultural operations in forage crops?

Or

(b) Give a brief about sequential cropping and intercropping?

15. (a) Importance of green manures and green leaf manures-discuss.

Or

(b) Tobacco curing methods-explain?

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Discuss in detail the agronomic package of practices for productivity enhancement of dryland cotton.

Or

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

17. (a) Give a detailed account of the agronomical package of practices for tobacco production?

Or

(b) Give a detailed account of the agronomical package of practices for cumbia Napier grass production?

18. (a) Explain Agronomic practices for sun hemp production.

Or

(b) Explain Agronomic practices for daincha production.

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C–8029	Sub. Code
	98132

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Agriculture

CROP PESTS AND THEIR MANAGEMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. Dead heart

2. Hopper burn

3. Rice tungro virus

4. Trap crop

5. Rosette flowers

6. ETL

7. HaNPV

8. Diapauses

9. Egg parasitoids

10. Repellents

Part B (5 × 5 = 25)

Answer **all** questions.

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

Or

(b) Borer complex in sugarcane and their management.

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

Or

(b) Major pests of gingelly and their management.

13. (a) Brinjal shoot and fruit borer biology and Management.

Or

(b) IPM for fruit fly in cucurbits.

14. (a) Describe symptoms of damage and management of Tea mosquito bug.

Or

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

15. (a) Mango leaf hoppers 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 rhinoceros beetle in coconut.

Or

(b) Enlist of major pests of tomato and explain their systematic position, biology, symptoms, and management.

18. (a) Explain the key rodent species and their management.

Or

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

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C–8030	Sub. Code
	98133

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Agriculture

CROP DISEASES AND THEIR MANAGEMENT

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. What is known as Kresek phase in paddy?

2. Name the vector that causes red gram sterility mosaic?

3. What is the actual symptom of sheath rot of paddy?

4. Write the symptom and climate favours the sorghum ergot.

5. Name the disease, vector and symptom of little leaf brinjal.

6. Write the phanerogamic parasite that impacts mango.

7. Describe the symptoms of Thanjavur wilt of coconut

8. Name the cole crop disease caused due to higher acidity? Describe its symptom.

9. Name the causal agent of Downy mildew of grapes.

10. Write the symptom of bunch top of banana.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Describe sourghum leaf shredding disease and its management.

Or

(b) Describe cumbu green ear symptom and its management.

12. (a) Describe the powdery mildew symptom of grapes and its management practices.

Or

(b) Describe the sesame phyllody symptom and its vector management.

13. (a) Describe sugarcane red rot symptom and explain its physical and chemical management.

Or

(b) Describe symptom Fusarium wilt of banana and its management practices.

14. (a) Describe symptom of moko wilt and its management practices.

Or

(b) Describe symptom of club root of cabbage and write the cycle of infection.

15. (a) Describe symptom of mahali disease of Arecanut and write its management practice briefly.

Or

(b) Describe symptom of pink disease in rubber and its management practices.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Briefly describe the blast disease and explains its etiology, mode of spread and its management practices.

Or

(b) Briefly describe the symptom etiological factor of mildew and powdery mildew of grapes and its management practices.

17. (a) Briefly describe rice tungro virus and illustrate its management practices.

Or

(b) Briefly describe the cotton fusarial wilt and its etiological factor mode of spread and its management practices.

18. (a) Describe briefly about the powdery mildew of pulses and its etiological factor and its management practices.

Or

(b) Describe briefly symptom mango anthracnose and its post-harvest management practices.

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C–8031	Sub. Code
	98134

DIPLOMA EXAMINATION, NOVEMBER 2022

Third Semester

Agriculture

METHODS OF PLANT BREEDING

(2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What you know about Plant breeding?

2. Discuss significance of source-sink relationship.

3. Based on conservation how you can classify the germplasm.

4. Explain about features of pureline.

5. Define Single Seed Descent Method.

6. Briefly explain about types of male sterility.

7. Hybrid varieties.

8. Plant tissue culture.

9. Write a short note on types of heterosis.

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) Define germplasm conservation and its types. 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 polyploid breeding in crop improvement discuss.

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

Or

(b) Discuss about the importance and steps of anther culture with its merits and demerits.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) What are the mechanisms promoting self and cross pollination in crop plants?

Or

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

17. (a) Define pedigree breeding and elaborate its procedure, features, merits and demerits for crop improvement in self-pollinated crops.

Or

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

18. (a) Discuss the steps in developing synthetics and composites with its merits and demerits.

Or

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

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C–8032	Sub. Code
	98135

DIPLOMA EXAMINATION, NOVEMBER 2022

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. Primary Sector
2. NNP
3. Taxes
4. Stock Resource
5. State Farming
6. RRB
7. Oligopoly
8. Marketing Margin
9. Retailer
10. Regulated Market

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain law of Demand.

Or

(b) What is Inflation and types of Farming.

12. (a) Summaries the types of Farming.

Or

(b) Write the '7' Costs Concepts in detail.

13. (a) Explain the different types of Agricultural Credits.

Or

(b) What is Agricultural Insurance and its types in detail.

14. (a) Functions of Private Money Lenders.

Or

(b) What is Producer Surplus and its types.

15. (a) Explain the Price Policy in India.

Or

(b) Write the different Marketing Functions.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Write Essay on Traditional and Modern Divisions of Economics.

Or

(b) Write Essay on different Sectors of Economy.

17. (a) Explain the Objectives and Functions of NABARD.

Or

(b) Summaries the various Sources of Risk and Manage Farm Risk in Detail.

18. (a) Write Essay on Co-operative Movements in India.

Or

(b) Classification of Agricultural Marketing in India.

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