

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.

C-6891

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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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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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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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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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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.
