DIPLOMA EXAMINATION, APRIL 2023

First Semester

Commercial Boriler Production Management

BASIC ANATOMY AND PHYSIOLOGY OF CHICKEN

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Strain
- 2. Single comb
- 3. Indian breeds of chicken
- 4. Gizzard
- 5. GALT
- 6. Pineal gland
- 7. Bursa of Fabricius
- 8. Broiler
- 9. Cloaca
- 10. Crop.

 $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) Integumentary parts of chicken.

Or

- (b) Classification of poultry based on the place of origin.
- 12. (a) Merit and demerits of hybrid chicken.

Or

- (b) Physiological standards of poultry.
- 13. (a) Discuss about the respiratory system of poultry.

Or

- (b) Role of kidney in poultry.
- 14. (a) Formation of egg and its composition.

Or

- (b) Components of blood in poultry.
- 15. (a) Immune system and its function.

Or

(b) Dual purpose breeds of poultry.

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

Answer all questions.

16. (a) Discuss in detail about circulatory system of poultry and its function.

Or

- (b) Role of skin, scales, nails, plumage and beak in poultry.
- 17. (a) Write in detail about the various parts of digestive system and its function with diagram.

Or

- (b) Discuss in detail about male and female reproductive system of poultry.
- 18. (a) Write in detail about the skeletal system of poultry with different type of bones.

Or

(b) Discuss in detail about the endocrine system and its function in poultry.

DIPLOMA EXAMINATION, APRIL 2023

First Semester

Commercial Broiler Production Management

BROILER HOUSING, EQUIPMENT AND ENVIRONMENT

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Gable roof
- 2. Flat deck cage
- 3. Battery cage
- 4. Californian cage system
- 5. Augular truss
- 6. Purlins
- 7. Half moniter
- 8. Ridge ventilation
- 9. Slat floor
- 10. Pen and run

 $(5 \times 5 = 25)$

Answer all questions

11. (a) Tunnel ventilation.

Or

- (b) Back yard system of poultry rearing.
- 12. (a) Automation in egg collection system.

Or

- (b) Automation in manure collection system.
- 13. (a) Semi-intensive system of poultry rearing.

Or

- (b) Cage system of poultry rearing.
- 14. (a) Basic principles of construction of poultry houses.

Or

- (b) Insulating material used in poultry houses
- 15. (a) Orientation of poultry houses.

Or

(b) Tier and furnished cage.

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Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Discuss in detail about feeding and watering space requirements for different age groups of broiler under different rearing conditions.

Or

- (b) Discuss in detail about the site selection, location and layout of broiler farm
- 17. (a) Write in detail about the importance of duct ventilation and windowless poultry house in broiler farm.

Or

- (b) Discuss in detail about the concept and application of automation in poultry industry.
- 18. (a) Write in detail about the equipments used in broiler farm and discuss the importance of nest boxes.

Or

(b) Discuss in detail about the fundamentals of ventilation and ventilation system adopted in poultry farm.

DIPLOMA EXAMINATION, APRIL 2023

First Semester

Commercial Broiler Production Management

INCUBATION AND HATCHERY MANAGEMENT

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Natural Incubation.
- 2. Vent sexing.
- 3. Physiological zero.
- 4. Fertility.
- 5. Candling.
- 6. Embryonic communication.
- 7. Hatchery waste.
- 8. Broiler hatchery.
- 9. In-ovo vaccination.
- 10. "Straight runs".

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Explain the principles of incubation.

Or

- (b) Write about role of computer in modern hatchery operations.
- 12. (a) Write briefly about single and multistage incubators.

Or

- (b) Write briefly about post hatch break open study.
- 13. (a) Explain briefly about the concept of fumigation in hatchery operations.

Or

- (b) Write briefly about the selection and care of hatching eggs.
- 14. (a) Write about hatchery flow chart for hatching eggs and chicks.

Or

- (b) List out the equipments used in modern hatchery.
- 15. (a) Write about hot water incubator vs forced draft incubator.

Or

(b) Give the aerial view of the Hatchery location.

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Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Discuss in detail about Incubation periods of different poultry species and physical factors for incubating chicken eggs.

Or

- (b) Write about major cause of eggs failing to hatch in a modern hatchery.
- 17. (a) Write in detail about various bio security procedures followed in hatchery operations.

Or

- (b) Discuss in detail about different types of malpositions commonly observed in unhatched eggs in hatchery.
- 18. (a) Discuss in detail about hatchery services in a commercial hatchery complex.

Or

(b) Write in detail about the importance of egg cold storage room in a commercial hatchery complex.

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DIPLOMA EXAMINATION, APRIL 2023

First Semester

Commercial Broiler Production Management

BROILER MANAGEMENT – I

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

 $\mathbf{Part} \mathbf{A} \qquad (10 \times 2 = 20)$

- 1. Strain
- 2. Down time
- 3. Feed efficiency
- 4. Dressing yield
- 5. Mortality
- 6. CFCR
- 7. NMPPB
- 8. Growth rate
- 9. All in all out system
- 10. Chlorination

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write briefly about different systems of rearing broilers.

Or

- (b) Write briefly about systems of integration in broiler production.
- 12. (a) Write in brief about Crop. Score assessment in broilers.

Or

- (b) Write in brief about water sanitation methods in broiler farm.
- 13. (a) Write briefly about BIS broiler feed standards.

Or

- (b) Write briefly about Lighting schedule for broilers.
- 14. (a) Write in brief about pipeline and tank cleaning in a broiler farm.

Or

- (b) Explain briefly about feeder maintenance in a broiler farm.
- 15. (a) Write briefly about the vaccination schedule for broilers.

Or

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(b) Write briefly about body weight uniformity in broilers.

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Write in detail about growth of broiler industry in India.

Or

- (b) Write in detail about the role of Government and NGOs in broiler industry in India.
- 17. (a) Write in detail about broiler management.

Or

- (b) Write in detail about bitten management in broiler production.
- 18. (a) Write in detail about feeding management of broilers.

Or

(b) Write in detail about systems of integration in broiler production.

DIPLOMA EXAMINATION, APRIL 2023.

Second Semester

Commercial Broiler Production Management

BROILER MANAGEMENT – II

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Fork lift
- 2. Feed withdrawal
- 3. Live shrink
- 4. Heat stroke
- 5. Dressing yield
- 6. Singeing
- 7. Evisceration
- 8. Smart packaging
- 9. Storage life
- 10. Codex regulation

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write in brief about different types of marketing of broilers.

Or

- (b) Write in brief about catching of live birds in a broiler farm.
- 12. (a) Write about different types of scolding followed in a broiler processing plant.

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- (b) Write about different methods of chilling followed in a broiler processing plant.
- 13. (a) What is Freezer burn? How to prevent it to maintain quality of broiler meat?

Or

- (b) Write about sequence of steps in poultry primary processing.
- 14. (a) Explain the modified Kosher method of bleeding followed in broiler processing plant.

Or

- (b) Write about carcass characteristics and cut up parts of broiler.
- 15. (a) Write about nutritive value of poultry meat.

Or

(b) Explain briefly about preparation of ready to cook poultry meat products.

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

Answer all questions.

16. (a) How will you manage broilers during winter season?

Or

- (b) How will you load and transport live broilers from your farm to meat processing plant?
- 17. (a) Write in detail about slaughter house operations to be carried out in a broiler processing plant.

Or

- (b) Write about the importance of customer complaints handling and customer relationship management in broiler marketing.
- 18. (a) Write in detail about different methods of packaging of poultry meat with their merits and demerits.

Or

(b) Write in detail about seven HACCP principles to be followed in meat processing plant.

DIPLOMA EXAMINATION, APRIL 2023

Second Semester

Commercial Broiler Production Management

BROILER NUTRITION AND FEED MILL TECHNOLOGY

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Nutrients
- 2. Critical vitamins
- 3. Prebiotics
- 4. Premix
- 5. Curled toe paralysis
- 6. Crazy chick disease
- 7. Antinutritional factors
- 8. DORB
- 9. BIS
- 10. Soft pellets

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write about Nutrients requirements of boiler as per BIS 2007.

Or

- (b) Write about conventional feed ingredients in poultry feed.
- 12. (a) Write about advantages and disadvantages in pellet feeding of broilers.

Or

- (b) Write about importance of feed production records in a feed plant.
- 13. (a) How will you store feed in a feed plant?

Or

- (b) Elaborate on sampling techniques for food ingredients.
- 14. (a) List out the macro mineral deficiencies in poultry.

Or

- (b) Write about importance of animal protein source in poultry feed formulation.
- 15. (a) List out various equipments used in poultry feed plant.

Or

(b) How will you transport poultry feed during different seasons?

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Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Classify feed ingredients and elaborate on non-conventional feed ingredients in poultry feed.

Or

- (b) Write about composition of any three commonly used plant proteins sources in poultry feed.
- 17. (a) List out different types and forms of feed and write about their merits and demerits.

Or

- (b) Write in detail on the use of enzymes in poultry nutrition.
- 18. (a) Write in detail on the proximate principles of feed and feed ingredients.

Or

(b) Write an essay on the mycotoxins and their prevention in poultry.

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DIPLOMA EXAMINATION, APRIL 2023

Second Semester

Commercial Broiler Production Management

BROILER FLOCK HEALTH, DISEASE AND BIO-SECURITY

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Susceptibility
- 2. Transmission
- 3. Clinical signs
- 4. Lesions
- 5. Pullorum disease
- 6. Vaccine
- 7. Antibiotic
- 8. Myco toxin
- 9. Enteritis
- 10. Mortality

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Mycoplasmosis in poultry.

Or

- (b) Salmonellosis in broiler.
- 12. (a) Fowl cholera infection in poultry.

Or

- (b) Control and treatment of Infectious coryza.
- 13. (a) Cutaneous form of fowl pox infection in layer chicken.

Or

- (b) Treatment and control of coccidiosis in broiler.
- 14. (a) Coliseptticaemia in young chicks.

Or

- (b) Control of Infectious bronchitis in broiler chicks.
- 15. (a) Prevention and control of aspergillosis in young chicks.

Or

(b) Ascites in poultry.

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

Answer all questions.

16. (a) Discuss in detail about the prevention and control of Marek's disease in commercial layers.

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(b) Discuss in detail about the etiology, transmission, clinical signs mortality and control of infectious bursal disease in broiler chicken.

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17. (a) Write in detail about the prevention and control of *colibacillosis* in broiler chicken.

Or

- (b) Discuss in detail about the importance of vaccine to control viral diseases in poultry.
- 18. (a) Write in detail about the various parasitic diseases of poultry with control measures.

Or

(b) Discuss in detail about the fungal disease of poultry with control measures.

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DIPLOMA EXAMINATION, APRIL 2023.

Second Semester

Commercial Broiler Production Management

BROILER ECONOMICS AND MARKETING

(2019 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Wet market
- 2. Deep litter
- 3. NMPPB
- 4. BCC
- 5. BROMARK
- 6. Marketing
- 7. Production cost
- 8. B.C.R
- 9. Livability
- 10. Dressing yield

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Feed efficiency in broiler production.

Or

- (b) New york dressing percentage.
- 12. (a) Objectives of poultry marketing.

Or

- (b) Business process in contract farming.
- 13. (a) Visual control system in broiler production.

Or

- (b) Broiler live birds marketing methods.
- 14. (a) Integration in broiler production.

Or

- (b) Methods and criteria for cost calculation in broiler production.
- 15. (a) Broiler performance efficiency factor.

Or

(b) All in all out system in broiler production.

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

Answer all questions.

16. (a) Discuss in detail about the marketing channels, challenges, suggestions and opportunities for marketing poultry products.

Or

(b) Discuss in detail about the bird shrinkages and transit loss problem in broiler marketing.

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17. (a) Write in detail about the records and registers maintenance in broiler farm.

Or

- (b) Discuss in detail about the various expenditure and its maintenance in broiler farming activities.
- 18. (a) Write in detail about the advantage and disadvantages of contract farming in broiler production.

Or

(b) Discuss in detail about the farmer and trader relationship management in contract farming.