

C-7994

Sub. Code

99511

DIPLOMA EXAMINATION, NOVEMBER 2022

First Semester

Poultry Health

AVIAN ANATOMY AND PHYSIOLOGY

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Difference between Commercial broiler and Broiler breeder
2. American breeds of chicken
3. Plasma and serum
4. Acid base balance
5. Pineal gland
6. Morphological characters of Asiatic class breeds
7. Erythropoiesis
8. Pneumatic bones
9. Larynx
10. Medullary bones.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Draw the structure of different types of combs and explain in brief with examples.

Or

- (b) Broiler and layer chicken hybrids available in India and its merits and demerits.

12. (a) Write briefly about various components of blood.

Or

- (b) Types of muscle fibre and functions.

13. (a) Explain briefly on the composition of bile.

Or

- (b) Answer briefly the Functions of bile

14. (a) Draw the structure of egg and mention its various parts.

Or

- (b) Describe in brief on the composition of egg.

15. (a) Various air sacs in chicken and their role in respiration.

Or

- (b) Draw the diagram of the spermatozoon of the chicken and label the parts.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on anatomy of the female reproductive tract of the chicken along with the formation of egg with necessary drawings.

Or

- (b) Write in detail on anatomy of the male reproductive tract of the chicken along with semen production with necessary drawings.
17. (a) Explain in detail on the anatomy of digestive tract and its functions in chicken with necessary drawings.

Or

- (b) Draw the diagram of avian heart with central blood circulation and explain the various functions of the same.
18. (a) Draw the various parts of excretory system of the chicken and describe in detail along with the formation of urine.

Or

- (b) Describe in detail on the flow of air in the respiratory system of the fowl with inhalation and exhalation process.
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C-7995

Sub. Code

99512

DIPLOMA EXAMINATION, NOVEMBER 2022

First Semester

Poultry Health

FUNDAMENTALS OF POULTRY MANAGEMENT

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Batch Interval
2. Down time
3. All in - All out system
4. Breed
5. Crop score
6. Finisher
7. Photostimulation
8. Pullet
9. Chilling of broiler carcass
10. Mechanically deboned meat

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Answer briefly on overview of poultry Industry.

Or

- (b) Answer briefly on systems of integration.

12. (a) Briefly mention about preparation of house to receive broiler day old chicks.

Or

- (b) Briefly mention about feeder and drinker alignment in commercial broiler chicks brooding / growing in deep lifter system of rearing

13. (a) Briefly mention about lighting management to be followed in commercial layer rearing.

Or

- (b) Briefly mention about grower requirements (floor space/ feeder / drinker / nutrient) in cage layer rearing (7-16 weeks)

14. (a) Briefly mention about various types of feed and feeding systems followed in commercial broiler

Or

- (b) Briefly mention about the importance of European Efficiency Factor (EEF) in broiler rearing.

15. (a) Briefly mention about the advantages and disadvantages of rearing layers on floor and cages.

Or

- (b) Answer briefly on the method / various steps involved in broiler meat processing

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on various commercial strains or broiler available in the Indian market and their performance goals under standard conditions

Or

- (b) Write an essay on principles of incubation and various types of incubators utilised in the hatchery
17. (a) Write an essay on body weight monitoring of commercial broiler chicks and weak bird management.

Or

- (b) Write an essay on commercial layer management from day old to 72 weeks of age.
18. (a) Write an essay on various preservation methods employed for the preservation of broiler meat.

Or

- (b) Write an essay on implementation of HACCP in broiler meat processing
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C-7996

Sub. Code

99513

DIPLOMA EXAMINATION, NOVEMBER 2022.

First Semester

Poultry Health

FUNDAMENTALS OF AVIAN HEALTH

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Macrophages
2. Antibodies
3. Antigens
4. Vaccine
5. Acquired immunity
6. Cytokines
7. Prophylaxis
8. Egg borne diseases
9. DNA vaccine
10. Parental immunity

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain briefly on Immune organs of the chicken.

Or

- (b) Answer briefly on various functions of avian immune system.

12. (a) Briefly mention about immune modulation in poultry.

Or

- (b) Briefly mention about the classification of inflammation.

13. (a) What are the measures to be taken during outbreak of diseases?

Or

- (b) Briefly mention about various types of tumours in poultry.

14. (a) Briefly mention about various pathological conditions associated with nutritional imbalances.

Or

- (b) Briefly mention about various precautions to be undertaken during handling of hatching eggs.

15. (a) Briefly mention various adjuvant utilised in the preparation of vaccines.

Or

- (b) Answer briefly on various types of vaccines available for the prevention and control of poultry diseases.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on various types of immunity present in avian immune system.

Or

- (b) Write an essay on various cultivation methods followed in the laboratory for bacteria and virus.

17. (a) Write an essay on various types and sources of infection in avian species.

Or

- (b) Write an essay on various miscellaneous pathological conditions of chicken

18. (a) Write an essay on various general and specific signs of disease in the breeder flock.

Or

- (b) Write an essay on procedures for post mortem examination of birds.
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C-7997

Sub. Code

99514

DIPLOMA EXAMINATION, NOVEMBER 2022

First Semester

Poultry Health

FLOCK HEALTH AND BIOSECURITY

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Sex separate feeding
2. Horizontally transmitted diseases
3. Quarantine of poultry
4. Spiking in breeder
5. Physiological zero
6. Anthelmintic for poultry
7. Routes of vaccination
8. Compartmentalization
9. Shuttle and rotation programme
10. Pre and post vaccination care

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain briefly about procedure for the preparation of vaccine and general precautions to be taken care during vaccination.

Or

- (b) Answer briefly about vaccination schedule for broilers.

12. (a) Explain briefly about flock uniformity in breeder flocks.

Or

- (b) Write briefly on breeder male and female management.

13. (a) Explain briefly about water sanitizers (Generics) commonly used in the broiler farms

Or

- (b) Write briefly about general precautions of medications through water and feed

14. (a) Explain briefly about the Newcastle disease.

Or

- (b) Write briefly about vaccination schedule for broiler breeders.

15. (a) What are the various methods of waste disposal for hatchery waste and dead birds.

Or

- (b) Describe in brief on the various disinfectants (Generics) used in the broiler farm and hatchery along with their mode of action

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on selection and care of hatching eggs.

Or

- (b) Write an essay on factors affecting fertility and hatchability

17. (a) Write an essay on various measures to prevent disease outbreak

Or

- (b) Write an essay on various methods to be adopted in Fly control programme in poultry farms

18. (a) Write an essay on Gumboro disease

Or

- (b) Describe in detail on the importance and advantages of biosecurity including conceptual, structural and operational biosecurity
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C-6862

Sub. Code

99521

DIPLOMA EXAMINATION, APRIL 2022

Second Semester

Poultry Health

DISEASES OF POULTRY I (BACTERIAL AND VIRAL)

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Morbidity
2. Omphalitis
3. EDS-76
4. HACCP
5. GMP
6. Quarantine
7. Etiology
8. Leechi disease
9. Vaccination
10. Active immunity

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Salmonellosis-clinical signs and etiology.

Or

- (b) Infectious coryza-prevention and control.

12. (a) Medication in poultry.

Or

- (b) Vaccination schedule for broilers.

13. (a) Gumboro disease-transmission and etiology.

Or

- (b) Avian influenza variant types.

14. (a) Vertically transmitted diseases in poultry.

Or

- (b) Avipox-postmortem lesions and diagnosis.

15. (a) Mycoplasmosis-diagnosis and treatment.

Or

- (b) Feed quality testing.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on the etiology, host and transmission, signs, morbidity and mortality, gross lesions, diagnosis, treatment and control of Infectious Laryngo tracheitis.

Or

- (b) Write in detail on the etiology, host and transmission, signs, morbidity and mortality, gross lesions, diagnosis, treatment and control of Fowl Cholera.

17. (a) Describe in detail on the etiology, host and transmission, signs, morbidity and mortality, gross lesions, diagnosis, treatment and control of Newcastle disease.

Or

- (b) Write in detail on the etiology, host and transmission, signs, morbidity and mortality, gross lesions, diagnosis, treatment and control of Infectious Bursal disease.
18. (a) Describe in detail on analyzing post vaccinal immune response in poultry.

Or

- (b) Describe in detail on maintaining Salmonella and Mycoplasma free breeding flock.
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C-6863

Sub. Code

99522

Diploma EXAMINATION, APRIL 2022

Second Semester

Poultry Health

**DISEASES OF POULTRY II (PARASITIC, FUNGAL
METABOLIC AND DEFICIENCY DISEASES)**

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Gout
2. Brooder pneumonia
3. Round worms
4. Scaly leg
5. Aflatoxin
6. Star gazing
7. Curled toe paralysis
8. *Eimeria tenella*
9. Cryptosporidiosis
10. Cannibalism

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Vitamin B6 deficiency.
Or
(b) Perosis.
12. (a) Cage layer fatigue.
Or
(b) Common vices of chicken.
13. (a) Bumble foot.
Or
(b) Crazy chick disease.
14. (a) Histomonosis.
Or
(b) Rickets.
15. (a) Control of ectoparasites.
Or
(b) Vitamin B1 deficiency.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on the etiology, host and transmission, signs, morbidity and mortality, gross lesions, diagnosis, treatment and control of Aflatoxicosis.
Or
(b) Write in detail on the etiology, host and transmission, signs, morbidity and mortality, gross lesions, diagnosis, treatment and control of Coccidiosis.

17. (a) Describe in detail on the etiology, host and transmission, signs, morbidity and mortality. gross lesions, diagnosis, treatment and control of Fatty Liver Haemorrhagic Syndrome.

Or

- (b) Write in detail on the etiology, host and transmission, signs, morbidity and mortality. gross lesions, diagnosis, treatment and control of Ascites.
18. (a) Describe in detail on Trichomonosis and treatment of tape worm infections in poultry.

Or

- (b) Describe in detail on Malabsorption syndrome in poultry.
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C-6864

Sub. Code

99523

DIPLOMA EXAMINATION, APRIL 2022.

Second Semester

Poultry Health

CONVENTIONAL AND MODERN DIAGNOSTIC TOOLS

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Serological test
2. Gram positive bacteria
3. RTPCR
4. Hybridoma
5. Monoclonal antibody
6. Agar gel
7. Bacteria
8. Southern blot
9. HAI test
10. Nucleic acid

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Colony morphology

Or

- (b) Tube Agglutination test

12. (a) Immune histochemistry

Or

(b) Counter immune electrophoresis

13. (a) Isolation of causative organisms

Or

(b) Nested PCR

14. (a) Blast analysis

Or

(b) Mutiplex PCR

15. (a) Northern blotting technique

Or

(b) Plate agglutination test

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) List out the modern serological tests and explain one technique in detail.

Or

(b) Write in detail on the ELISA

17. (a) List out the nucleic acid amplification methods and explain one method in detail.

Or

(b) Compare between Hemagglutination and Hemagglutination Inhibition test.

18. (a) How do you compare modern serological diagnostic tests with nucleic acid amplification methods?

Or

- (b) List out the conventional serological methods and explain one method in detail.
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C-6865

Sub. Code

99524

DIPLOMA EXAMINATION, APRIL 2022.

Second Semester

Poultry Health

EPIDEMIOLOGY OF AVIAN DISEASES

(2021 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Epidemiology
2. One health
3. Zoonosis
4. Maps
5. Grids
6. Bacteria
7. Protozoa
8. Ecology
9. HSADL
10. Virus

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) National Animal Disease Reporting System

Or

- (b) Food hygiene

12. (a) Pattern of disease occurrence

Or

- (b) Role of BIS in food safety

13. (a) Biosecurity in feed mill

Or

- (b) Risk assessment

14. (a) Codex alimentarius

Or

- (b) World Trade Organization

15. (a) Data collection in poultry disease surveillance

Or

- (b) World Health Organization

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on aim and components of epidemiology.

Or

- (b) Write in detail on the poultry disease surveillance with special reference to objectives, types and contact tracing

17. (a) Write in detail on emerging and reemerging poultry diseases.

Or

(b) Write in detail on notifiable poultry diseases

18. (a) Write in detail on sanitary and phytosanitary measures about food of poultry origin.

Or

(b) Write an essay on factors influencing the occurrence of poultry diseases.
