C–7554	Sub. Code 80113

B.Sc. DEGREE EXAMINATION, APRIL 2026

First Semester

Poultry Science

POULTRY PRODUCTION SYSTEMS, HOUSING AND AUTOMATION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. An established group of birds within a class possessing a distinctive shape, size and conformation, which are true to the type is

   (a) Strain (b) Variety

   (c) Breed (d) Line

2. Normally chicks are reared in

   (a) Litter floor (b) Brooder cages

   (c) Slat (d) Both (a) & (b)

3. The minimum distance of two buildings in a farm should be

   (a) 10-15ft. (b) 20-25 ft.

   (c) 30-35 ft. (d) 40-45 ft.

4. The optimum temperature (°C) for broiler farming is

   (a) 02-10 (b) 12-20

   (c) 22-30 (d) 32-40

5. When outside temperature exceeds 29.4°C it is mandatory that poultry houses must be cooled by

(a) Low-pressure fogging system

(b) Pad-and-fan system

(c) High-pressure fogging system

(d) Any of the above

6. Floor space(ft2) requirements 0-8 weeks old Egg-type chicken in elevated cage layer house is

(a) 0.10 (b) 0.20

(c) 0.30 (d) 0.40

7. One infrared bulb is sufficient for brooding

(a) 100 chicks (b) 150 chicks

(c) 250 chicks (d) 350 chicks

8. This ventilation system is a perfect solution for areas with very cold or very warm climate.

(a) Cross (b) Negative pressure

(c) Positive pressure (d) Tunnel

9. This Automatic Feed System is mostly used for broilers from the age of 4 weeks onwards and layers from 9th week onwards

(a) Trough and Conveyor

(b) Conveyor and Chain

(c) Trough and Chain

(d) Conveyor and Pan

10. This type of nests are commonly used for commercial layers

(a) Open Type (b) Trap Type

(c) Tray nest (d) All the above

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Advantages of backyard system of rearing poultry

Or

(b) Feeding space requirements for different age groups of poultry

12. (a) Draw the aerial view of a farm layout.

Or

(b) Draw various types of roof for poultry houses.

13. (a) Fundamentals of ventilation in poultry houses

Or

(b) Insulation materials commonly used in poultry houses

14. (a) Use of nest boxes and egg filler flats in layer farms

Or

(b) Use of ventilators and exhaust fans in poultry farms

15. (a) Automation in egg grading system.

Or

(b) Automation in meat processing system

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) List out different systems of poultry rearing with their advantages and disadvantages

Or

(b) Write in detail on organic poultry production system

17. (a) Discuss in detail about macro environment on poultry production

Or

(b) Write in detail about importance of equipments in poultry farms

18. (a) Write in detail about Raised platform cage houses for poultry

Or

(b) Write in detail about environmentally controlled housing system for poultry

19. (a) List out different brooding equipments with their advantages and disadvantages

Or

(b) List out different feeding and watering equipments with their advantages and disadvantages

20. (a) Write in detail about automation in feed production

Or

(b) Write in detail about automation in hatchery operation.

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C–7555	Sub. Code 80115

B.Sc. DEGREE EXAMINATION, APRIL 2026

First Semester

Poultry Science

APPLIED AVIAN ANATOMY AND PHYSIOLOGY

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Brown eggshells are preferred in

   (a) France (b) India

   (c) United States (d) China

2. Today, practically all commercial white egg lines of chicken are

   (a) Single comb White Leghorns

   (b) Single comb RIR

   (c) White Plymouthrock

   (d) Light Sussex

3. The life span of erythrocytes of chicken averages from

   (a) 28-35 days (b) 35-40 days

   (c) 25-28 days (d) 21-24 days

4. Chicken consists of how many air sacs?

   (a) Seven (b) Eight

   (c) Nine (d) Ten

5. Medullary bone is absent in

(a) Female bird

(b) Male bird

(c) Non-laying female

(d) Both b and c

6. Which organ in birds synthesize uric acid?

(a) Pancreas (b) Liver

(c) Kidney (d) Cloaca

7. Which part of the digestive system is called as the glandular stomach?

(a) Gizzard (b) Proventriculus

(c) Esophagus (d) Crop

8. The duration required for digestion in fowl laying hen for the feed to pass from the mouth to the cloaca

(a) One and half hours

(b) Two hours

(c) Two and half hours

(d) Three hours

9. The hormone calcitonin is secreted by

(a) Ultimobronchial glands

(b) Parathyroid glands

(c) Thyroid glands

(d) Salivary glands

10. Hearing and sight in chicken are

(a) Not developed (b) Poorly developed

(c) Well developed (d) None of the above

Part B

$(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain briefly about the role of nails and scales

Or

(b) Write briefly about the role of plumage and beak in poultry

12. (a) Explain briefly about the inhalation and exhalation process in poultry

Or

(b) Write briefly about the lungs, bronchi and their function.

13. (a) Draw neatly the skeletal system of the chicken and explain.

Or

(b) Explain briefly about the role of kidneys and water

14. (a) Explain the female reproductive system of poultry with a neat diagram

Or

(b) Write briefly about the avian sperm with a neat diagram

15. (a) Explain briefly about the bone marrow and thymus

Or

(b) Explain briefly about the harderian gland and spleen

Part C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Write in detail on the external anatomy of poultry with neat diagrams

Or

(b) Explain in detail on the integumentary parts of chicken and feather tracts

17. (a) Write in detail on the syrinx, bronchi, lungs air sacs and their functions.

Or

(b) Describe in detail on the respiratory system of chicken with a neat diagram

18. (a) Describe in detail on the role of cloaca ad muscular system of chicken.

Or

(b) Describe in detail on the pneumatic, medullary, cervical, thoracic,fused, wing and limb bones

19. (a) Write in detail on the structure and its composition with a neat diagram.

Or

(b) Write in detail on the digestive process in poultry and the uses of saliva in digestion

20. (a) Describe in detail about the physiology of stress and adaptation in chicken

Or

(b) Describe in detail about the normal physiological indices in chicken and hormones of the fowl.

C–7556	Sub. Code
	80123

B.Sc. DEGREE EXAMINATION, APRIL 2026

Second Semester

Poultry Science

POULTRY NUTRITION AND FEED MILLING TECHNOLOGY

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. What is a key benefit of utilizing non-conventional feed resources in animal diets?

   (a) High cost

   (b) Improved digestibility

   (c) Sustainability and reduced feed costs

   (d) High protein content

2. Which of the following is most likely to limit the digestibility of protein in non-conventional feedstuffs?

   (a) High fiber content

   (b) Presence of anti -nutritional factors

   (c) Low moisture content

   (d) High carbohydrate content

3. Which factor is most likely to influence the nutrient digestibility of feed when switching from mash to pellet form in poultry?

(a) Feed particle size

(b) Feed color

(c) Feed cost

(d) Feed moisture content

4. In which of the following scenarios would phase feeding be most beneficial?

(a) When feeding poultry in a single growth stage

(b) To adjust nutrient levels according to different production phases

(c) When feeding birds with a fixed nutrient composition diet

(d) For feeding only during winter months

5. Which of the following is a common mycotoxin found in feed that can cause liver damage in poultry?

(a) Aflatoxin (b) Ochratoxin

(c) Dioxin (d) Fumonisin

6. Which type of feed additive is primarily used to enhance the digestibility of feed and improve nutrient absorption?

(a) Antioxidants (b) Probiotics

(c) Toxin binders (d) Emulsifiers

7. In feed mill operations, which processing stage involves applying steam and moisture to improve pellet quality and nutrient digestibility?

(a) Grinding

(b) Mixing

(c) Conditioning

(d) Cooling

8. Which type of feed mill equipment is designed to reduce the size of grains and other feed ingredients into smaller particles?

(a) Pellet mill

(b) Hammer mill

(c) Conveyor

(d) Sifter

9. What is the primary goal of implementing Good Manufacturing Practices (GMP) in feed mills?

(a) To enhance marketing strategies

(b) To ensure biosecurity

(c) To maintain consistent feed quality and safety

(d) To reduce production costs

10. Which regulation ensures that feed manufacturing practices comply with both national and international standards for safety and quality?

(a) Organic feed certification

(b) Designer feed guidelines

(c) GMP and HACCP protocols

(d) SPF egg production standards

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the classification of nutrients and their importance in animal nutrition.

Or

(b) Describe the difference between conventional and unconventional feed resources, providing examples of each.

12. (a) How do phase feeding and precision feeding optimize nutrient intake and Improve performance for commercial layers and broilers?

Or

(b) How do feeding strategies for ducks, turkeys and Japanese quails vary across different seasons.

13. (a) Discuss the classification of feed toxins and their impact on poultry health, including strategies for their prevention.

Or

(b) Explain how pesticide toxicity affects poultry and describe practical measures to reduce its risk in feed management.

14. (a) Discuss the principles of least-cost formulation in poultry feed and how it helps in optimizing feed ingredients while maintaining nutritional quality.

Or

(b) Explain the key differences between horizontal and vertical mixers in feed milling and their impact on the uniformity of feed mixture.

15. (a) Describe the role of physical and chemical evaluation in ensuring the safety and quality of poultry feed.

Or

(b) Discuss the importance of bio security measures in maintaining feed quality and preventing contamination in poultry feed mills.

Part C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Discuss the importance of macro and micro-nutrients in Poultry diets and the effects of their deficiencies.

Or

(b) Evaluate the benefits and challenges of using conventional and non-conventional feed resources in poultry nutrition.

17. (a) Evaluate the impact of feed form (mash, pellet, crumble) and feeding strategies (ad libitum, restricted, phase) on poultry performance.

Or

(b) Analyze common nutritional deficiencies and metabolic disorders in poultry and propose strategies to manage these issues.

18. (a) Analyze the effects of mycotoxins like aflatoxin and ochratoxin on poultry health and performance, and discuss strategies for their prevention and management.

Or

(b) Examine the roles and benefits of feed supplements and additives such as synbiotics, phytobiotics, and toxin binders in enhancing poultry nutrition, growth, and health.

19. (a) Evaluate how feed mill layout and equipment choices, impact the efficiency and quality of poultry feed production.

Or

(b) Discuss the effects of pelleting and crumbling technologies on poultry feed digestibility and performance, and explain the importance of packaging and labeling in preserving feed quality.

20. (a) Discuss how GMP and HACCP protocols control hazards and ensure compliance with organic, designer, and SPF egg production standards in feed manufacturing.

Or

(b) Discuss the impact on maintenance of high-quality poultry feed and ensure compliance with regulatory requirements.

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C–7557

Sub. Code
80125

B.Sc. DEGREE EXAMINATION, APRIL 2026.

Second Semester

Poultry Science

INCUBATION AND HATCHERY MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Hatching eggs should be collected daily in the breeder farms

   (a) Three to four times

   (b) 2 times

   (c) 5 times

   (d) One time

2. For every day hatching eggs are stored after four days, hatching time is delayed

   (a) 45 minutes (b) 30 minutes

   (c) 60 minutes (d) 50 minutes

3. Incubation period for Japanese quail eggs

   (a) 17 days (b) 21 days

   (c) 28 days (d) 42 days

4. Appearance of alimentary tract in development of embryo is seen at

(a) 16 hours of incubation

(b) 19 hours of incubation

(c) 22 hours of incubation

(d) 24 hours of incubation

5. Hatching eggs have to be kept in the setter up to

(a) 19^{th} day of incubation

(b) 17^{th} day of incubation

(c) 20^{th} day of incubation

(d) 18^{th} day of incubation

6. The recommended relative humidity for hatcher compartment is

(a) 50% (b) 60%

(c) 70% (d) 75 – 80%

7. Candling of hatching eggs has to be done at setter at

(a) 7^{th} day of incubation

(b) 17^{th} day of incubation

(c) 10^{th} day of incubation

(d) 18^{th} day of incubation

8. Single strength concentration of fumigation refers to

(a) 20 g $KMNO_4$+40 ml Formalin

(b) 20 g $KMNO_4$+20 ml Formalin

(c) 40 g $KMNO_4$+20 ml Formalin

(d) 40 g $KMNO_4$+40 ml Formalin

9. The hatch day break out analysis should be performed at least once

(a) Every week (b) Every two weeks

(c) Both (a) and (b) (d) None of the above

10. New method of sanitation currently being made available to hatcheries involves

(a) Electrostatic technology

(b) Hatcher air ionization

(c) Both (a) and (b)

(d) None of the above

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain briefly about hatchery lay out.

Or

(b) Give a brief account of selection of hatching eggs.

12. (a) Write briefly about the effect of temperature on hatchability of chicken.

Or

(b) Explain briefly about the effect of humidity on hatchability of chicken.

13. (a) Write briefly about setter management.

Or

(b) Briefly explain the types of incubators.

14. (a) Write briefly about pedigree hatching.

Or

(b) Explain briefly about grading of chicks.

15. (a) Explain briefly about chick quality assessment.

Or

(b) Write briefly about malformations of chicken embryo.

Part C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Describe in detail on the design and construction of hatchery.

Or

(b) Describe in detail on the different methods of fumigation of hatching eggs.

17. (a) Describe in detail on the physical requirements of incubation.

Or

(b) Describe in detail on the events in the chicken embryonic development.

18. (a) Discuss in detail on automation in hatchery.

Or

(b) Describe in detail on the single stage and multiple stage incubators.

19. (a) Write in detail about hatchery operations.

Or

(b) Write in detail about In-Ovo and In-hatch vaccinations and medications.

20. (a) Describe in detail about factors affecting hatchability.

Or

(b) Describe in detail about biosecurity measures to be followed in hatchery.

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C–7558	Sub. Code
	80133

B.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Poultry Science

PRINCIPLES OF POULTRY BREEDING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Section A (10 × 1 = 10)

Answer **all** questions.

1. Which of the following is a qualitative trait in poultry?

   (a) Egg production

   (b) Comb pattern

   (c) Weight gain

   (d) Egg size

2. What is the primary purpose of auto sexing in poultry?

   (a) To enhance growth rate

   (b) To distinguish male and female chicks at day old age

   (c) To improve egg production

   (d) To improve meat quality

3. Which of the following is an example of sex-linked inheritance?

(a) Feathering pattern at day-old age

(b) Comb shape

(c) Egg production rate

(d) Inheritance of color blindness in chickens

4. What is hybridization in poultry breeding?

(a) Crossing individuals within the same breed

(b) Crossing individuals of different species

(c) Selecting the best individuals for breeding

(d) Crossing genetically identical individuals

5. Which mating system involves crossing birds of different breed?

(a) Random mating

(b) Inbreeding

(c) Outbreeding

(d) Pair mating

6. Which method of mating is used to maintain genetic diversity in a poultry flock?

(a) Inbreeding

(b) Outbreeding

(c) Line breeding

(d) Pen mating

7. What is the primary goal of the tandem method of selection?

(a) To improve one trait at a time

(b) To improve multiple traits simultaneously

(c) To select birds based on performance records

(d) To eliminate undesirable traits

8. What is an ideal breeding program in poultry?

(a) A system that maximizes egg production

(b) A plan for improving genetic traits and performance over generations

(c) A method of crossbreeding different species

(d) A strategy for increasing the flock size

9. The mostly used breed as male line in commercial broiler breeding programme is

(a) New Hampshire

(b) Cornish

(c) White Plymouth Rock

(d) Rhode Island Red

10. What is the ideal time for artificial insemination in chicken breeder?

(a) 8.00 am — 10.00 am

(b) 11.00 am — 1.00 pm

(c) 2.00 pm — 3.00 pm

(d) 5.00 pm — 7.00 pm

Section B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the genetic classification of poultry breeds.

Or

(b) Describe the chromosome number and their significance in different species of poultry.

12. (a) What is hybridization, and how is it used in poultry breeding?

Or

(b) Explain about dominance and recessiveness.

13. (a) Discuss the difference between family and pedigree selection.

Or

(b) Explain about individual selection.

14. (a) Explain about selection index.

Or

(b) Selection of meat type lines in poultry.

15. (a) Describe the significance of commercial hybrids in poultry farming.

Or

(b) Analyze the role of pure line stocks in improving poultry genetics for both meat and egg production.

Section C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain the concept of qualitative traits and provide examples in poultry breeding.

Or

(b) Discuss the characteristics of different poultry breeds, focusing on their origin.

17. (a) Explain Mendelian inheritance with specific examples.

Or

(b) Discuss the principles of controlling inheritance in poultry and their applications.

18. (a) Describe the methods of mating: Flock, Pen, and Pair mating.

Or

(b) Explain about heredity and environment basis of selection.

19. (a) Write about methods of selection based on their phenotypic value.

Or

(b) Describe the concept of selection for both egg-type and meat-type lines in poultry breeding.

20. (a) Explain the concept of pure lines and the importance of Great Grandparent, Grandparent, and Parent breeders in poultry breeding.

Or

(b) What is artificial insemination and write about importance in poultry breeding?

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C–7559

Sub. Code
80134

B.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Poultry Science

BREEDER CHICKEN MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Litter of brooder should be
   (a) 2" deep (b) 4" deep
   (c) 6" deep (d) 8" deep

2. The male line of commercial broiler is
   (a) Cornish (b) White Leghorn
   (c) Plymouth Rock (d) RIR

3. Which of the following is essential for brooding
   (a) Heating source (b) Reflectors
   (c) Brooder guard (d) All the above

4. During growing period, the light hours should be
   (a) 16 (b) 24
   (c) 12 (d) 18

5. First day vaccine is done at hatchery against which disease

(a) ND (b) MD

(c) IBD (d) ILT

6. Chemical used for fumigation

(a) Formalin (b) $KMnO_4$

(c) Both (a) and (b) (d) None

7. The ratio of male and females in case of egg-type breeder

(a) 1:10 (b) 1:20

(c) 1:15 (d) 1:25

8. pH of chicken semen is

(a) 5 (b) 9

(c) 7 (d) 10

9. Advantage of feed restriction during growing period is

(a) Reduce feed cost

(b) Pullets accumulate less fat

(c) Produce heavier eggs

(d) All the above

10. Which of the following is commercial layer strain

(a) Cobb (b) Bovans

(c) Arbor Acres (d) Ross

Part B

$(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Structure of breeder industry.

Or

(b) GGP and GP parent.

12. (a) Write about grading and uniformity.

Or

(b) Write in brief identification of sexing error and culling.

13. (a) Feeding of male breeders.

Or

(b) Management of nest box.

14. (a) Care of hatching eggs.

Or

(b) Selection of hatching eggs.

15. (a) Hen housed egg production.

Or

(b) Feed efficiency.

Part C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain about production standards of broiler and layer breeders.

Or

(b) Write about commercial strains of broilers and layers.

17. (a) Write in detail about lighting management of growing chicks.

Or

(b) Explain in detail about feeding and watering of breeder growing chicks.

18. (a) Explain in detail about vaccination and medication schedules for breeders.

Or

(b) Write about breeder male management.

19. (a) Discuss in detail about artificial insemination in breeders.

Or

(b) Discuss in detail about summer and winter management of breeders.

20. (a) Write in detail about broiler and layer breeder performance parameters.

Or

(b) Calculate the cost of production of day old chick.

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C–7560

Sub. Code
80136

B.Sc. DEGREE EXAMINATION, APRIL 2026

Third Semester

Poultry Science

CLIMATOLOGY AND POULTRY PRODUCTION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Koppen's classification of climate is based on a subdivision of terrestrial climates into how many types?

   (a) Three (b) Four

   (c) Five (d) Six

2. How many basic natural resources are there?

   (a) Two (b) Three

   (c) Four (d) Five

3. Methane is present in atmospheric air at which level?

   (a) 2 ppm (b) 0.5 ppm

   (c) 10 ppm (d) None

4. The atmosphere consists of _____ percent oxygen.

(a) 78 (b) 21

(c) 1 (d) None of the above

5. Who is the father of agrometerology in India?

(a) Mohan singh mehta

(b) Ramanan

(c) L.A. Ramadas

(d) None of the above

6. During summer, water consumption of birds increases to _____.

(a) two times (b) three to four times

(c) not increased (d) none

7. The overhang of the poultry house should be _____ in the tropics.

(a) 3.5 feet (b) 5 feet

(c) 2 feet (d) None

8. Which vitamin is antistressor and increases the survivability of heat stressed birds?

(a) Vitamin A (b) Vitamin C

(c) Vitamin D (d) Vitamin E

9. Fresh water accounts for only _____% of all water on Earth?

(a) 2.5 (b) 3.0

(c) 3.5 (d) 4.0

10. The World Health Organization (WHO) defines noise above _____ decibels (dB) as noise pollution.

(a) 60 (b) 65

(c) 50 (d) 55

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write down one of the best practices on natural resource management observed in your district.

Or

(b) Explain briefly about Thornthwaite classification of climate.

12. (a) What is climate change? How it affects poultry production?

Or

(b) Explain briefly about the effect of air composition and its speed on poultry production.

13. (a) Explain briefly about weather forecasting for poultry.

Or

(b) Brief about winter management in commercial layers.

14. (a) Discuss briefly on remedial measures for poultry during monsoon.

Or

(b) Explain briefly about feeding management in broiler farming.

15. (a) Explain in brief about radioactive pollution.

Or

(b) Explain briefly about water pollution.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) What is climate assessment? How organizational climate assessment is conducted?

Or

(b) What is ecosystem? Explain in detail on ecological pyramids and ecolosuccession.

17. (a) Explain in detail on the temperature zones. Also explain the effect of relative humidity and light on poultry production.

Or

(b) Write an essay on micro and macro climate.

18. (a) Explain in detail on summer management of commercial layers.

Or

(b) Write in detail about the natural heat resistant breeds/varieties developed in India.

19. (a) Write an essay on housing management for different species of poultry.

Or

(b) Discuss in detail on importance of water management in poultry farms.

20. (a) Explain in detail on nuclear and biological disasters.

Or

(b) Write in detail on man made disasters.

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C–7561

Sub. Code
80143

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fourth Semester

Poultry Science

COMMERCIAL BROILER CHICKEN PRODUCTION MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. National Meat and Poultry Processing Board is located in
   (a) New Delhi (b) Chennai
   (c) Kolkatta (d) Mumbai

2. The broiler price is fixed by
   (a) NECC (b) BCC
   (c) Both (a) and (b) (d) None

3. Brooding temperature for broiler chicks during first week
   (a) 80 degrees Fahrenheit
   (b) 85 degrees Fahrenheit
   (c) 90 degrees Fahrenheit
   (d) 95 degrees Fahrenheit

4. Floor space requirement for broiler chicks during 5 to 7 days.

(a) 0.6 sq.ft/chick

(b) 0.5 sq.ft/chick

(c) 0.8 sq.ft/chick

(d) 1.2 sq.ft/chick

5. During growing, relative humidity inside the broiler house should be within _____.

(a) 50-60% (b) 60-70%

(c) 70-80% (d) 80-90%

6. For feed and water broilers should not move more than

(a) 0.5 metre (b) 1 metre

(c) 1.5 metres (d) 2 metres

7. Nitrate level in drinking water should be

(a) 10 mg/litre (b) 14 mg/litre

(c) 125 mg/litre (d) 32 mg/litre

8. One feeder is sufficient for

(a) 30 growers (b) 40 growers

(c) 50 growers (d) 60 growers

9. Ideal FCR in broiler farming

(a) 2 (b) 1.9

(c) 1.8 (d) 1.6

10. The permissible livability percentage in broiler farming

(a) 90 (b) 96

(c) 92 (d) 98

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write briefly about broiler coordination committee.

Or

(b) Explain briefly about multiple batch system of rearing with its advantages and disadvantages.

12. (a) How will you the brooder house to receive the broiler chicks?

Or

(b) Write briefly about crop score assessment.

13. (a) Explain briefly about good qualities of lifter materials for broiler chicken.

Or

(b) Write briefly about feeding management of broiler chicken.

14. (a) Write briefly about water quality standards for broilers.

Or

(b) Explain briefly about winter management of broiler chicken.

15. (a) Write briefly about lifting of broiler.

Or

(b) Explain briefly about feed conversion ratio of broiler chicken.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Write in detail about SWOT analysis ot broiler industry in India.

Or

(b) Write in detail about biosecurity measures to be followed in broiler farms.

17. (a) Describe in detail about brooder management of broiler chicks.

Or

(b) Describe in detail about lighting management in broiler farm.

18. (a) Discuss in detail about litter management in broiler farming.

Or

(b) Discuss in detail on drinker management in broilers.

19. (a) Describe in detail about water sanitation in a broiler farm.

Or

(b) Describe in detail about management of broiler chicken during summer season.

20. (a) Write in detail on performance monitoring in broilers.

Or

(b) Discuss in detail on broiler finisher management.

C–7562

Sub. Code
80144

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fourth Semester

Poultry Science

POULTRY DISEASES, FLOCK HEALTH AND BIOSECURITY

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Ranikhet disease is caused by

   (a) RNA virus

   (b) Orthomyxovirus

   (c) Avian paramyxovirus type 1

   (d) Herpes virus

2. Infectious bronchitis disease is caused by

   (a) Corona virus

   (b) Orthomyxovirus

   (c) Paramyxovirus

   (d) Herpes virus

3. E.coli produces _____ colonies on Mac Conkey's agar.
   (a) Black (b) Violet
   (c) Pink (d) Greyish

4. Who was the first to attenuate the causative organism of Fowl Cholera?
   (a) Pasteur (b) Heddleston
   (c) Sander (d) Glisson

5. Caecal coccidiosis is caused by
   (a) *Eimeria necatrix*
   (b) *Eimeria tenella*
   (c) *Eimeria bruneti*
   (d) *Eimeria acervulina*

6. Deficiency of Vitamin B2 in chicks induces
   (a) Encephalomalacia
   (b) Rickets
   (c) Curled toe paralysis
   (d) Anaemia

7. All in all out system of rearing means
   (a) The same group of birds enters and leaves the farm
   (b) Different groups of birds in the farm
   (c) Both (a) and (b)
   (d) None of the above

8. Didecyl dimethyl ammonium chloride is used as water sanitizer at the dose rate of
   (a) 1 ml in 5 litres of drinking water
   (b) 1 ml in 10 litres of drinking water
   (c) 2 ml in 5 litres of drinking water
   (d) 2 ml in 10 litres of drinking water

9. First dose of IBD vaccination should be given in broilers at the age of
   (a) 5-7 days (b) 12-14 days
   (c) 21-23 days (d) 28-30 days

10. Live vaccines should be stored at the temperature of

(a) Room temperature (b) 18°C

(c) 4°C (d) –18°C or less

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write briefly about post mortem lesions of Ranikhet disease.

Or

(b) Write briefly preventive measures against Avian Influenza.

12. (a) Explain briefly about colibacillosis.

Or

(b) Write briefly about prevention and control of CRD.

13. (a) Explain briefly about ochratoxicosis.

Or

(b) Write briefly about endoparasites.

14. (a) Explain briefly about structural biosecurity.

Or

(b) Write briefly about water sanitizers commonly used in the poultry farms.

15. (a) Explain briefly about live and killed vaccines.

Or

(b) Discuss about precautions to be taken by vaccinators.

Part C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Describe in detail on the etiology, host and transmission, signs, morbidity and mortality, lesions, diagnosis, treatment and control of Fowl Pox.

Or

(b) Describe in detail on the etiology, host and transmission, signs, morbidity and mortality, lesions, diagnosis. treatment and control of Infectious Bursal Disease.

17. (a) Discuss in detail about Colibacillosis.

Or

(b) Discuss in detail about Infectious coryza in chicken.

18. (a) Discuss in detail about Aflatoxicosis in poultry.

Or

(b) Discuss about aspergillosis and its prevention and control measures.

19. (a) Write in detail about shed cleaning and disinfection procedures in poultry farms.

Or

(b) Write in detail about fumigation procedure in poultry farms.

20. (a) Describe in detail about general principles and practises of water medication in Poultry farms.

Or

(b) Describe in detail about types of vaccine and vaccination schedule for commercial layers.

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C–7563	Sub. Code
	80146

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fourth Semester

Poultry Science

POULTRY PROCESSING AND WASTE MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the questions.

1. A quality control procedure which allows the assessment of egg quality is

   (a) Kindling (b) Candling

   (c) Handling (d) Testing

2. The part which is responsible for shell formation is

   (a) Infundibulum (b) Magnum

   (c) Uterus (d) Isthmus

3. The aldehyde groups of the carbohydrates reacting with the amino group of the proteins in the egg/products in the processing step to form a insoluble brown, off-odour compound is called as

   (a) Fermentation (b) Desugarization

   (c) Pasteurization (d) Maillard reaction

4. Reduction of gelation in raw yolk is done by

(a) Fast freezing and Slow thawing

(b) Fast freezing and Fast thawing

(c) Slow freezing and Slow thawing

(d) Slow freezing and Fast thawing

5. Patchy discolouration on the surface of the frozen offal (liver and kidney) due to loss of moisture from surface tissues is known as

(a) Meat darkening

(b) Cold store taint

(c) Freezer burn

(d) Loss of bloom

6. It is essential for humane method of slaughtering birds

(a) Stunning (b) Bleeding

(c) Scalding (d) Defeathering

7. Microwave heating can be used for

(a) Precooking (b) Cooking

(c) Freeze drying (d) All the above

8. Weight lost by birds during the time period between feed withdrawal and slaughter is referred to as

(a) Dehydration

(b) Live shrink

(c) Debility

(d) None of the above

9. The average nutrient content (NPK%) of poultry manure is

(a) l.03;2.63;1.4 (b) 2.03;2.63;1.4

(c) 3.03;2.63:1.4 (d) 4.03;2.63;l.4

10. Biological hazards associated with the consumption of improperly cooked chicken meat is caused by

(a) Virus (b) Bacteria

(c) Fungus (d) All the above

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) External egg quality characteristics.

Or

(b) Nutritive values of chicken eggs.

12. (a) Importance of egg processing industry in India.

Or

(b) Packaging of egg powder.

13. (a) Methods of slaughter of poultry.

Or

(b) Importance of cut-up-parts in poultry slaughtering.

14. (a) Flow chart for canning of meat.

Or

(b) Materials used in packaging of poultry meat.

15. (a) Importance of recycling of poultry manure.

Or

(b) Liquid waste management in a poultry processing unit.

Part C

(5 × 8 = 40)

Answer **all** the questions, choosing either (a) or (b).

16. (a) Write in detail on formation and structure of chicken egg.

Or

(b) Write in detail on preservation of chicken eggs.

17. (a) Discuss in detail about principles and flow chart of egg powder processing.

Or

(b) Discuss in detail about plan, layout and design of egg processing plant.

18. (a) Write in detail about different steps in dressing of chicken.

Or

(b) Write in detail about equipment used in poultry processing plant.

19. (a) Discuss in detail about meat spoilage and quality deterioration.

Or

(b) Discuss in detail about Regulations for import and export of poultry products.

20. (a) Write in detail about various types of waste from poultry industry and their utility.

Or

(b) Write in detail about dead bird disposal in a poultry farm.

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C–7564	Sub. Code 80151

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fifth Semester

Poultry Science

COMMERCIAL LAYER CHICKEN PRODUCTION MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. The value of feed efficiency per dozen eggs in a well-maintained farm should be

   (a) 1.6 (b) 2.0

   (c) 2.2 (d) 2.5

2. The total egg production in India during 2023-24 is

   (a) 138.38 billion numbers

   (b) 142.77 billion numbers

   (c) 130 billion numbers

   (d) 125 billion numbers

3. Floor space requirement for layer chicks under deep litter system is

   (a) 0.5 sq. ft (b) 1 sq. ft

   (c) 2.0 sq. ft (d) 1.5 sq. ft

4. RDVF vaccine has to be given to the chicks during _____ days

(a) 12-14 (b) 5-7

(c) 28-30 (d) 9-10

5. The space between the keel and the pubic bones in good layers is

(a) 2-3 fingers (b) 3-4 fingers

(c) 4-5 fingers (d) none

6. Growers are transferred from the grower house to the layer house when they are weeks old

(a) 18 (b) 21

(c) 22 (d) 23

7. In terms of exports, Namakkal tops the country, handling _____% of its table egg exports

(a) 85 (b) 90

(c) 95 (d) 80

8. The eggs can be stored at room temperature for _____ days

(a) 7-10 (b) 10-14

(c) 14-18 (d) 18-20

9. NFEI value of _____ and above is desirable

(a) 40 (b) 45

(c) 50 (d) 35

10. Which part of computer vision system converts visual images to numerical images pixels in the monitoring of poultry?

(a) Image processing board

(b) hardware

(c) software

(d) camera sensor

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain briefly about the role of NECC

Or

(b) Write briefly about common terms used in layer production

12. (a) Explain briefly about the dipping and deworming in layers

Or

(b) Write briefly about the feeding management in layers

13. (a) Write briefly about culling in layers

Or

(b) Explain briefly about the vaccination schedule for layers

14. (a) Give a brief account of monsoon management of layers

Or

(b) Write briefly about collection of eggs in layer farms

15. (a) Explain briefly about the difference between HHEP and HDEP

Or

(b) Explain briefly about the feed efficiency per dozen eggs and kg egg mass

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Write in detail on the economic traits in layers

Or

(b) Explain in detail on the status of layer production in India

17. (a) Write in detail on the lighting management in layer farms and also write about the management of weak birds

Or

(b) Describe in detail on the litter management in layer farms

18. (a) Describe in detail on the forced moulting procedures in layers

Or

(b) Describe in detail on the water sanitation in layer farms

19. (a) Write in detail on the winter and monsoon management of layers

Or

(b) Write in detail on the layer industry in India

20. (a) Describe in detail about the overview of computer vision in poultry monitoring

Or

(b) Describe in detail about layer production indices in layer farming

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C–7565

Sub. Code
80152

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fifth Semester

Poultry Science

POULTRY PRODUCTION ECONOMICS AND MARKETING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. The branch of economics that studies individual economic agents and unit: individuals, households, firms and industries.

   (a) Microeconomics (b) Macroeconomics

   (c) Both (d) None

2. Average retail price of chicken eggs is

   (a) Rs.8 (b) Rs.5

   (c) Rs.7 (d) Rs.9

3. How many types of vertical integration in poultry farming?

   (a) Two (b) Three

   (c) Four (d) Five

4. In India, integration was started by Suguna during the year.

(a) 1994 (b) 1995

(c) 1996 (d) 1997

5. Broiler coordination committee is situated in ———— in Tamil Nadu.

(a) Palladam (b) Erode

(c) Coimbatore (d) Namakkal

6. The current processing levels in poultry are

(a) 4% (b) 5%

(c) 6% (d) 7%

7. NAFED was established in the year.

(a) 1958 (b) 1959

(c) 1960 (d) 1961

8. NECC was established in the year

(a) 1980 (b) 1981

(c) 1982 (d) 1983

9. ———— are covered in the poultry insurance in the age group of 1 day of old to 72 week.

(a) Layer birds (b) Hatchery birds

(c) Both (d) None

10. General insurance business was nationalized in India in the year.

(a) 1971 (b) 1972

(c) 1973 (d) 1974

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain briefly the difference between microeconomics and macroeconomics.

Or

(b) Write briefly about GDP, GNP, Asset, Liability and balance sheet.

12. (a) Explain briefly about the concepts of integration.

Or

(b) Write briefly about the role of integrator in poultry egg production.

13. (a) Write briefly about the BCC.

Or

(b) Explain briefly about the BROMARK.

14. (a) Give a brief account of NECC.

Or

(b) Write briefly about the role of traders in egg marketing.

15. (a) Explain briefly about the poultry insurance.

Or

(b) Explain briefly about the rates of premium for poultry farming.

Part C

(5 × 8 = 40)

Answer **all** questions choosing either (a) or (b).

16. (a) Write in detail on the cost of production of table egg and hatching egg.

Or

(b) Explain in detail on the requirements of financial assistance.

17. (a) Write in detail on the breeder farm integration.

Or

(b) Describe in detail on advantages and constrains of integration methods.

18. (a) Describe in detail on the broiler contract farming.

Or

(b) Describe in detail on the broiler live bird marking channels in Tamil Nadu.

19. (a) Write in detail on the organizational structure of egg marking in India.

Or

(b) Write in detail on the egg marking channels in Tamil Nadu.

20. (a) Describe in detail about the comprehensive cover for poultry farms.

Or

(b) Describe in detail about the procedure for claim settlement.

———————

C–7566

Sub. Code
80153

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fifth Semester

Poultry Science

POULTRY PRODUCTS TECHNOLOGY AND VALUE ADDITION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Section A (10 × 1 = 10)

Answer **all** the questions.

1. Which of the following is caused by the rupture of one or more small blood vessels in the yolk follicle at the time of ovulation?

   (a) Meat spots

   (b) Blood spots

   (c) Check

   (d) Leaker

2. Eggs held at 35 degrees Fahrenheit may retain quality _____ than eggs held at 60 degrees Fahrenheit.

   (a) Longer

   (b) Shorter

   (c) Both

   (d) None

3. A boiled egg that has been wrapped in sausage, breaded and deep-fried or baked is called as

(a) Egg salad

(b) Scotch egg

(c) Egg drink

(d) None

4. What is the name of the drink made from eggs?

(a) Egg nog

(b) Milk punch

(c) Egg milk punch

(d) All the above

5. Goose meat has _____ fat per cent.

(a) 5

(b) 6

(c) 7

(d) 8

6. Turkey meat has _____ crude protein content.

(a) 21%

(b) 22%

(c) 23%

(d) 24%

7. Retort pouch is heated to _____ under high pressure.

(a) 116-121 degrees celcius

(b) 110-115 degrees celcius

(c) 122-125 degrees celcius

(d) None

8. Deboning process is done _____ evisceration.

(a) Before

(b) After

(c) Both

(d) None

9. Food Safety and Standards Authority of India was founded in the year

(a) 2007

(b) 2008

(c) 2009

(d) 2010

10. The FAO predicts _____ % year-on-year growth, adding 1.1 million tons to reach a total of 146 million tons.

(a) 0.8

(b) 1.2

(c) 1.5

(d) 2.0

Section B (5 × 5 = 25)

Answer **all** the questions, choosing either (a) or (b).

11. (a) Explain briefly the functional property of chicken eggs.

Or

(b) Write briefly about external quality of chicken eggs.

12. (a) Explain briefly about the fried eggs.

Or

(b) Write briefly about the packaging of eggs.

13. (a) Write briefly about the retort processing.

Or

(b) Explain briefly about the importance of further processing of poultry meat.

14. (a) Give a brief account of preparation of ready to cook poultry products.

Or

(b) Write briefly about the transport of chicken meat products.

15. (a) Explain briefly about the role of WHO in poultry meat quality assurance.

Or

(b) Explain briefly about the role of FSSAI.

Section C (5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Write in detail on the industrial uses of chicken eggs.

Or

(b) Explain in detail on the pre and ovi-positional value addition of eggs.

17. (a) Write in detail on the pickled eggs and egg roll ups.

Or

(b) Describe in detail on scotch eggs and egg drinks.

18. (a) Describe in detail on the sensory evaluation of poultry meat.

Or

(b) Describe in detail on the proximate composition and nutritive value of poultry meat.

19. (a) Write in detail on the canned poultry meat products.

Or

(b) Write in detail on the restructured poultry meat products.

20. (a) Describe in detail about the microbial safety of poultry egg and meat products.

Or

(b) Describe in detail about the quality and safety management system in poultry meat processing.

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C–7567

Sub. Code
80154

B.Sc. DEGREE EXAMINATION, APRIL 2026

Fifth Semester

Poultry Science

DIVERSIFIED POULTRY PRODUCTION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Zoological name for Japanese quails is

   (a) *Anas platyrhyncos*

   (b) *Meleagris gallopavo*

   (c) *Anser anser*

   (d) *Coturnix coturnix japonica*

2. Incubation period for Muscovy ducks is

   (a) 42 days (b) 54 days

   (c) 17 days (d) 35 days

3. The Broad breasted bronze turkey originated in

   (a) France (b) England

   (c) North America (d) Canada

4. The dressing percentage for broiler turkeys is about _____ per cent

(a) 75 (b) 77

(c) 78 (d) 72

5. It is difficult to tell the difference between the sexes of emu

(a) from 3 to 14 months

(b) from 16 to 18 months

(c) from 18 to 20 months

(d) None of the above

6. The volume of one ostrich egg is on average equivalent to those of _____ chicken eggs

(a) 20 (b) 21

(c) 23 (d) 24

7. The recommended diet for larger parrots is

(a) 80% pellets with 10-15% healthy vegetables and 5-10% fresh fruits

(b) 60% pellets with 20-25 % healthy vegetables and 15-20% fresh fruits

(c) 70% pellets with 15-20 % healthy vegetables and 15-20% fresh fruits

(d) None of the above

8. A _____ weight loss is normal during the weaning process of pet birds

(a) 1-5 (b) 10-15

(c) 5-10 (d) 15-20

9. Parrot fever is known as

(a) Psittacosis (b) Palyomavirus

(c) PDD (d) None

10. The most common internal parasite found in ducks is

(a) Tape worms (b) Nematodes

(c) Trematodes (d) None

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain briefly the egg type ducks.

Or

(b) Write briefly about incubation in Japanese quails.

12. (a) Explain briefly about the production parameters of guinea fowl.

Or

(b) Write briefly about the feeding management of turkey.

13. (a) Write briefly about ostrich paediatrics.

Or

(b) Explain briefly about the foki brooders.

14. (a) Give a brief account of hand rearing pet birds.

Or

(b) Write briefly about squab production.

15. (a) Explain briefly about diseases of emu and its control measures.

Or

(b) Explain briefly about the diseases of pet birds and its control measures.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Write in detail on the systems of rearing ducks. Also write on the management of indigenous duck flocks in Tamilnadu.

Or

(b) Explain in detail on the advantages of rearing Japanese quails. Explain also the management of meat type quails.

17. (a) Write in detail on housing system of guinea fowl. Also write their feeding requirements.

Or

(b) Describe in detail on turkey egg and meat production.

18. (a) Describe in detail on the nutrient requirements of ostrich and products from ostrich.

Or

(b) Describe in detail on the emu brooding management and sex identification in emu.

19. (a) Write in detail on the housing, breeding and nutrition management of parrots.

Or

(b) Write in detail on the management of love birds.

20. (a) Describe in detail about diseases of duck and geese.

Or

(b) Describe in detail about diseases of turkey and its control measures.

———————