C–4471

Sub. Code
80113

B.Sc. DEGREE EXAMINATION, APRIL 2025

First Semester

Poultry Science

POULTRY PRODUCTION SYSTYEMS, HOUSING AND AUTOMATION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** questions.

Choose the correct answer

1. Floor space requirement for layers under cage system of rearing is.
   (a) 1sq.ft/brid (b) 1.5sq.ft/brid
   (c) 2sq.ft/bird (d) 0.5sq.ft/brid

2. Optimum temperature inside the house required for rearing broilers.
   (a) 18-20 degree celcius
   (b) 22-30 degree celcius
   (c) 30-32 degree celcius
   (d) None of the above

3. The land where there is ongoing cultivation of different grains, pulses, vegetable and fruits is called.
   (a) Fertile land (b) Infertile land
   (c) Both a and b (d) None of the above

4. The tunnel ventilated broiler should have width up to.

(a) 20 feet (b) 24 feet

(c) 35 feet (d) 40 feet

5. An ideal construction coefficient should be _____ for better performance of the flock.

(a) 30 per cent (b) 35 per cent

(c) 40 per cent (d) 45 per cent

6. Which of the following roof material roof material has high durability?

(a) Asbestos (b) Thatched roof

(c) Aluminium (d) Tiles

7. One chick drinker is sufficient for _____ chicks.

(a) 35 (b) 50

(c) 40 (d) 45

8. How many growers can be transported in a crate?

(a) 5-10 (b) 10-20

(c) 20-25 (d) None of the above

9. The components of automatic egg collection system include.

(a) Conveyor belt

(b) Egg elevator

(c) Egg platform and egg counter

(d) All of the above

10. The passage rate of Lubing nipple drinker is.

(a) 60-70 ml/minute (b) 70-80 ml/minute

(c) 80-90 ml/minute (d) 90-100 ml/minute

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write briefly about multiple batch system.

Or

(b) Explain briefly about watering and feeding space requirements for Japanese quails and turkeys.

12. (a) Explain briefly about open sided poultry house.

Or

(b) Write briefly about macro environment in poultry production.

13. (a) Write briefly about duct ventilation.

Or

(b) Explain briefly about roof materials.

14. (a) Give a brief account of nest box and egg filler flats.

Or

(b) Write briefly about ventilators and exhaust fans.

15. (a) Explain briefly about automation in housing the broilers.

Or

(b) Explain briefly about automation in egg grading system.

Part C (5 × 8 = 40)

Answer **all** questions.

16. (a) Write in detail about backyard and intensive system of rearing poultry.

Or

(b) Write in detail about different poultry housing systems in India.

17. (a) Discuss in detail about the poultry farm plan and lay out for rearing 5000 layers under 1+3 system.

Or

(b) Discuss in detail on the poultry farm location and comfort zone of the birds in poultry house.

18. (a) Describe in detail about raised platform cage housing system.

Or

(b) Describe in detail about litter management in poultry farming.

19. (a) Write in detail about dubbing and bebeaking equipment. Also explain how they are used?

Or

(b) Write in detail about A type cages type cages, AI equipment, Foggers and Sprinklers.

20. (a) Describe in detail about automation in hatchery operations.

Or

(b) Describe in detail about automation in egg and meat processing plants.

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C–4472

Sub. Code
80115

B.Sc. DEGREE EXAMINATION, APRIL 2025

First Semester

Poultry Science

APPLIED AVIAN ANATOMY AND PHYSIOLOGY

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the questions.

1. Which breed belongs to American class of poultry?

   (a) New Hampshire (b) Cochin

   (c) Leg horn (d) Cornish

2. Zoological name for turkey is

   (a) *Anas platyrinchos* (b) *Gallus domesticus*

   (c) *Numida meleagris* (d) *Meleagris gallopavo*

3. Erythrocytes in birds are

   (a) Nucleated

   (b) Contain mitochondria

   (c) Contain endoplasmic reticulum

   (d) All of the above

4. Normal heart rate in goose is

(a) 200-275 beats/minute

(b) 200 beats/minute

(c) 500-600 beats/minute

(d) 350-475 beats/minute

5. Birds possess a pair of extra bones in the shoulder area, called

(a) Coracoids (b) Keel

(c) Clavicle (d) Humerus

6. The urine of birds consists mostly of

(a) Urea (b) Uric acid

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

7. The first part of the oviduct

(a) Magnum (b) Infundibulum

(c) Uterus (d) Isthmus

8. Salivary glands in the mouth region secrete the enzyme namely

(a) Amylase (b) Peptidase

(c) Lipase (d) Maltase

9. Chicks will not consume water that contains in excess of

(a) 1.2% salt (b) 0.9% salt

(c) 1.5% salt (d) 2% salt

10. Calcitonin is produced by

(a) Thyroid glands

(b) Parathyroid glands

(c) Ultimobronchial glands

(d) Pineal gland

Part B (5 × 5 = 25)

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

11. (a) Explain briefly the role of skin and feather in poultry.

Or

(b) Write briefly about comb patterns of chicken.

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

Or

(b) Write briefly about types of blood vessels and components of blood.

13. (a) Write briefly about the role of cloaca and ureter in chicken.

Or

(b) Explain briefly about the pneumatic and medullary bones.

14. (a) Give a brief account of hormones of the fowl.

Or

(b) Write briefly about pharyngeal and esophageal region in digestive system of chicken.

15. (a) Explain briefly about functions of Harderian gland and Spleen.

Or

(b) Explain briefly about the principles of poultry behaviour.

Part C (5 × 8 = 40)

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

16. (a) Write in detail on the classification and breeds of chicken.

Or

(b) Explain in detail on the integumentary parts of chicken. Explain also the role of plumage, nails and beak in poultry.

17. (a) Write in detail on anatomical structures of nasal cavity, larynx, bronchi, trachea and lungs.

Or

(b) Describe in detail on structure and functions of heart with a neat diagram.

18. (a) Describe in detail on avian muscular system with a neat diagram.

Or

(b) Describe in detail on different types of bones with neat diagram.

19. (a) Write in detail on male reproductive system with a neat diagram.

Or

(b) Write in detail about physiology of egg production in poultry.

20. (a) Describe in detail about avian nervous system with a neat diagram.

Or

(b) Describe in detail about normal physiological indices of chicken.

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C–4473	Sub. Code
	80123

B.Sc. DEGREE EXAMINATION, APRIL 2025

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 the main function of the digestive system in animals?

   (a) Production of blood cells

   (b) Breakdown and absorption of nutrients

   (c) Regulation of body temperature

   (d) Oxygen transport

2. What is the primary function of fiber in animal diets?

   (a) Providing energy

   (b) Aiding in digestion

   (c) Building muscles

   (d) Enhancing flavor

3. Which of the following is a common metabolic disorder in poultry?

(a) Ketosis (b) Rickets

(c) Grass tetany (d) Ascites

4. Which feeding method is specifically designed to meet the nutrient requirements during different production stages?

(a) Restricted feeding

(b) Phase feeding

(c) Supplementary feeding

(d) Ad libitum feeding

5. What is the term for the use of both probiotics and prebiotics in feed?

(a) Synbiotics

(b) Phytobiotics

(c) Antioxidants

(d) Emulsifiers

6. What is the purpose of antioxidants in feed?

(a) To improve nutrient absorption

(b) To reduce oxidative stress

(c) To enhance palatability

(d) To increase feed shelf life

7. What is the primary function of a cyclone in a feed mill?

(a) To mix feed ingredients

(b) To separate dust and particles

(c) To grind feed particles

(d) To convey feed materials

8. Which of the following is a critical factor in feed storage?

(a) Temperature control

(b) Humidity control

(c) Pest control

(d) All of the above

9. What is the purpose of physical evaluation in feed quality control?

(a) To detect contaminants

(b) To determine nutritional content

(c) To evaluate texture and appearance

(d) To determine shelf life

10. What is raw material adulteration?

(a) Adding inferior materials to feed

(b) Removing valuable nutrients from feed

(c) Contaminating feed with harmful substances

(d) All of the above

Part B (5 × 5 = 25)

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

11. (a) Discuss the importance of energy sources in poultry diets.

Or

(b) Explain the classification of feed ingredients with examples.

12. (a) Describe the benefits and drawbacks of ad libitum feeding in poultry management.

Or

(b) Explain the differences between mash, pellet, and crumble feed forms.

13. (a) What is the difference between feed supplements and feed additives?

Or

(b) What are phytobiotics, and how do they benefit poultry?

14. (a) What are the key factors to consider in feed storage?

Or

(b) What is the purpose of elevators and conveyors in feed mills.

15. (a) What is raw material adulteration, and how can it be detected.

Or

(b) Describe the importance of systematic quality control in feed production.

Part C

$(5 \times 8 = 40)$

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

16. (a) Explain the process of digestion in poultry, focusing on the role of the digestive system in nutrient absorption.

Or

(b) Describe the importance of balanced nutrition in poultry, emphasizing the role of energy and protein sources in feed formulation.

17. (a) Evaluate the advantages of precision feeding in poultry production and its role in optimizing feed efficiency and bird performance.

Or

(b) Explain the feeding practices for breeder chickens, focusing on the nutritional requirements during different stages of production.

18. (a) Describe the role of herbs and performance enhancers in poultry feed, including their benefits and limitations.

Or

(b) Discuss the benefits and risks associated with the use of antibiotics in poultry feed.

19. (a) Explain the advantages and disadvantages of pelleting and crumbling technology.

Or

(b) Discuss the principles of least-cost feed formulation and its benefits.

20. (a) Discuss the national and international regulations on feed manufacturing.

Or

(b) Discuss the various stages of feed production and the quality control measures at each stage.

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C–4474	Sub. Code
	80125

B.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Poultry Science

INCUBATION AND HATCHERY MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Section A (10 × 1 = 10)

Answer **all** the questions.

1. Relative humidity of hatcher should be around

   (a) 45% – 55% (b) 75% – 80%

   (c) 55% – 60% (d) 65% – 75%

2. Physiological zero temperature is

   (a) 24 °C (b) 47 °C

   (c) 35 °C (d) 15 °C

3. In incubator, the trays are turned by _____ degrees in either direction.

   (a) 180° (b) 45°

   (c) 360° (d) 90°

4. Day old broiler chick weight is

   (a) 40 – 45 g (b) 50 – 60 g

   (c) 15 – 20 g (d) 95 – 100 g

5. During incubation, first candling of eggs should be done at

(a) 4^{th} day (b) 1^{st} day

(c) 10^{th} day (d) 18^{th} day

6. Pipped fail may be due to

(a) High Humidity (b) Calcium Deficiency

(c) Low Temperature (d) All Are Correct

7. The early death of embryo can be recognised by

(a) Absence of blood vessels

(b) Full of blood vessels

(c) Absence of motility

(d) Foul smell

8. The incubation period for chicken egg

(a) 26 days (b) 28 days

(c) 21 days (d) 18 days

9. Duration of fumigation of hatching eggs is

(a) 1 hr (b) 30 mts

(c) 60 mts (d) 2 hr

10. Vaccine against _____ disease is done for day old chicks at hatchery.

(a) Avian influenza (b) Asperigillosis

(c) Marek's disease (d) Ranikhet disease

Section B (5 × 5 = 25)

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

11. (a) Methods of incubation.

Or

(b) Egg storage room.

12. (a) Effects of humidity on hatchability of eggs.

Or

(b) Gaseous environment in the incubator and its effect on hatchability.

13. (a) Management of setters during and after incubation of chicks.

Or

(b) Components of incubators.

14. (a) Hatchery operation protocol.

Or

(b) Grading of chicks.

15. (a) Break open analysis.

Or

(b) Hatchery sanitation.

Section C (5 × 8 = 40)

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

16. (a) Write in detail about design and construction of hatchery.

Or

(b) Discuss in detail about fumigation and storage of hatching eggs.

17. (a) Explain in detail about physical requirements of incubation.

Or

(b) Discuss in detail about embryonic development of chicken.

18. (a) Write in detail about single and multi stage incubators.

Or

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

19. (a) Write in detail about pedigree hatching and chick grading.

Or

(b) Discuss in detail about chick sexing, packing and dispatch.

20. (a) Explain the factors affecting hatchability.

Or

(b) Discuss about the waste management in hatchery.

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C–4475

Sub. Code
80133

B.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Poultry Science

PRINCIPLES OF POULTRY BREEDING

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the questions.

1. Alternative forms of genes are called as ————————

   (a) Chromosomes (b) Loci

   (c) Alleles (d) Cytoplasm

2. Number of macro-chromosomes in chicken

   (a) 12 (b) 33

   (c) 6 (d) 66

3. Example for dominant character

   (a) Golden plumage (b) Single comb

   (c) Fast feathering (d) White skin

4. Cross between two different breed is called as

   (a) Out breeding (b) Inbreeding

   (c) Upgrading (d) Cross breeding

5. Arbour Acres is a

(a) White egg layer (b) Brown egg layer

(c) Broiler (d) None

6. Single male mated with 10-12 females is called as

(a) Pen mating (b) Flock mating

(c) Shift mating (d) Stud mating

7. Selection for a single trait at a time is

(a) Tandom selection

(b) Mass selection

(c) Reciprocal recurrent selection

(d) All the above

8. The ability of a parent to stamp its characters on its offspring is

(a) Hybrid vigor (b) Nicking

(c) Prepotency (d) heterosis

9. Naked neck is

(a) Incomplete dominance

(b) Dominance

(c) Co dominance

(d) Recessive

10. Non-Allelic interaction is termed as

(a) Dominance (b) Additive interaction

(c) Recessiveness (d) Epistasis

Part B (5 × 5 = 25)

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

11. (a) Qualitative traits in broilers.

Or

(b) Genetic classification of poultry.

12. (a) Difference between homozygous and heterozygous individuals.

Or

(b) Write about law of segregation and recombination.

13. (a) Random mating.

Or

(b) Pedigree selection.

14. (a) Independent culling levels.

Or

(b) Different selection methods

15. (a) Great grandparent stock.

Or

(b) Commercial hybrid chicken.

Part C (5 × 8 = 40)

Answer **all** the questions.

16. (a) Write in detail about auto-sexing with example.

Or

(b) Write about economic traits of broilers.

17. (a) Describe in detail about dihybrid cross with an example.

Or

(b) Discuss in detail about various methods for distinguishing sex at hatching time.

18. (a) Explain in detail about progeny testing in poultry.

Or

(b) Explain in detail about different breeding systems in poultry.

19. (a) Explain in detail about ideal breeding porgramme.

Or

(b) Discuss in detail about selection criteria followed in egg type lines.

20. (a) Explain in detail about objectives of poultry breeding for egg production.

Or

(b) Discuss in detail about artificial insemination in poultry.

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C–4476

Sub. Code
80134

B.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Poultry Science

BREEDER CHICKEN MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** questions.

1. Most of the commonly available breeds, varieties etc were developed from pure breed

   (a) Cornish

   (b) Rhode Island Red

   (c) White Plymouth Rock

   (d) All the above

2. Common egg-type hybrid chicken is

   (a) Cobb (b) Ross

   (c) Hubbard (d) BV300

3. Floor space requirement for broiler breeder adult under cage system is

   (a) 1.0ft²/bird (b) 1.5ft²/bird

   (c) 2.0ft²/bird (d) 2.5ft²/bird

4. One nest box may be provided for every ———— birds.

(a) 1-3 (b) 4-6

(c) 7-9 (d) 9-11

5. Crude protein (%) content of chicken breeder male mash should be

(a) 13-14% (b) 15-16%

(c) 17-18% (d) 19-20%

6. Younger males will replace the older males in breeder flock is called as

(a) Spiking (b) Nicking

(c) specking (d) Picking

7. Females should be inseminated at least once in 5 days, with this quantity of semen

(a) 0.01-0.03 ml (b) 0.03-0.05 ml

(c) 0.05-0.07 ml (d) 0.07-0.09 ml

8. The required Temperature and Relative humidity in chicks holding room is

(a) 50° F and 55%

(b) 70° F and 70%

(c) 65° F and 75%

(d) 75° F and 75%

9. Reasons for good hatches are

(a) Proper care of eggs prior to incubation

(b) Parent stock fed a nutritionally optimum diet

(c) Proper incubation practices

(d) All the above

10. Hen-housed egg production percentage for a period is calculated based on

(a) Total no. of eggs laid during that period

(b) No. of birds at start

(c) Both (a) and (b)

(d) None of the above

Part B $(5 \times 5 = 25)$

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

11. (a) Breeder chicken integration in India.

Or

(b) Commercial strains of broilers.

12. (a) Shed preparation before the arrival of chicks.

Or

(b) Importance of crop score in broiler chicks.

13. (a) Pre-lay nutrition in breeder farms.

Or

(b) Maintaining male female ratios in breeder farms.

14. (a) Sanitation of hatching eggs.

Or

(b) Packaging and dispatch of hatching eggs.

15. (a) Record in breeder production and management.

Or

(b) Factors affecting hatchability.

Part C (5 × 8 = 40)

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

16. (a) Write in detail on production standards of layer breeder parent stock.

Or

(b) Write in detail on size and structure of breeding industries in India.

17. (a) Discuss in detail about feeding management of broiler breeder farm.

Or

(b) Discuss in detail about health management of broiler breeder farm.

18. (a) Write in detail about litter management in breeder farm.

Or

(b) Write in detail about housing requirement of broiler breeder.

19. (a) Discuss in detail about artificial insemination in a breeder farm.

Or

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

20. (a) Write in detail about performance parameter monitoring in a breeder farm.

Or

(b) Write in detail about cost of production of hatching eggs and day old chicks.

C–4477	Sub. Code
	80136

B.Sc. DEGREE EXAMINATION, APRIL 2025

Third Semester

Poultry Science

CLIMATOLOGY AND POULTRY PRODUCTION

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

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–4478	Sub. Code
	80143

B.Sc. DEGREE EXAMINATION, APRIL 2025.

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

16. (a) Write in detail about SWOT analysis of 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 lifter 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.

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C–4479	Sub. Code
	80144

B.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Poultry Science

POULTRY DISEASES, FLOCK HEALTH AND BIOSECURITY

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

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 does rate of

(a) 1ml in 5 litres of drinking water

(b) 1ml in 10 litres of drinking water

(c) 2ml in 5 litres of drinking water

(d) 2ml in 10 litres of drinking water

9. First does 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 $(5 \times 5 = 25)$

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 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 endoparasits

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 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.

C–4480	Sub. Code
	80146

B.Sc. DEGREE EXAMINATION, APRIL 2025.

Fourth Semester

Poultry Science

POULTRY PROCESSING AND WASTE MANAGEMENT

(2023 onwards)

Duration : 3 Hours Maximum : 75 Marks

Section A (10 × 1 = 10)

Answer **all** 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 steps 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 Freezing

(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 dyeing (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) 1.03; 2.63; 1.4 (b) 2.03;2.63;1.4

(c) 3.03;2.63;1.4 (d) 4.03;2.63;1.4

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

Section B $(5 \times 5 = 25)$

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) How 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.

Section C (5 × 8 = 40)

Answer **all** 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 poultry farm.

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