

**C-0059**

**Sub. Code**

**80123**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Second Semester**

**Poultry Science**

**INCUBATION AND HATCHERY MANAGEMENT**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Still-air incubator
2. Amnion
3. Incubation period
4. Ventilation
5. Egg storage room
6. Air cell
7. Blastodisc
8. Blastoderm
9. Blood ring
10. Sexing of chicks

**Part B**

(5 × 5 = 25)

Answer **all** the questions.

11. (a) Explain briefly about important physical factors at setter.

Or

- (b) Write briefly about important physical factors at hatcher.

12. (a) Explain briefly about transfer of hatching eggs to hatcher.

Or

- (b) Write briefly about care of pulling of hatch and hardening.

13. (a) Write briefly about vaccination at hatchery.

Or

- (b) Explain briefly about candling of hatching eggs at different stages.

14. (a) Explain about gaseous environment in incubation.

Or

- (b) Write briefly about importance of Relative humidity during incubation.

15. (a) Explain briefly major causes of hatching eggs failing to hatch.

Or

- (b) Write briefly about fumigation of hatching eggs.

**Part C**

(3 × 10 = 30)

Answer **all** the questions.

16. (a) Describe in detail about incubation methods.

Or

- (b) Write in detail about physical requirements for incubation.

17. (a) Explain in detail about the post hatch break open study.

Or

- (b) Write an essay on the role of computers in hatchery operations.

18. (a) Write in detail about chemicals used in hatchery to maintain sanitation.

Or

- (b) Describe in detail about hatchery waste management.

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**C-0060**

**Sub. Code**

**80124**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Second Semester**

**Poultry Science**

**POULTRY NUTRITION AND FEED MILLING  
TECHNOLOGY**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Limiting amino acids.
2. True metabolizable energy.
3. Fat-soluble vitamins.
4. DDGS.
5. Molasses.
6. Gossypol.
7. Enzyme.
8. AGP.
9. Crumbling.
10. Proximate analysis.

**Part B**

(5 × 5 = 25)

Answer **all** the questions.

11. (a) Explain briefly about vegetable of protein sources.

Or

- (b) Write briefly about feeding of Azolla to poultry.

12. (a) Write brief answer on Restricted feeding.

Or

- (b) Explain briefly about metabolic disorders in chicken.

13. (a) Write briefly about mycotoxin and its prevention in poultry feed ingredients.

Or

- (b) Explain briefly about mechanism of action of probiotics.

14. (a) Compare Horizontal and Vertical mixer.

Or

- (b) Write briefly about labelling of processed feed.

15. (a) Explain briefly about biosecurity in feed mills.

Or

- (b) Explain CCP in feed mill unit.

**Part C**

(3 × 10 = 30)

Answer **all** the questions.

16. (a) Write in detail about major and micro nutrients to poultry.

Or

- (b) Classify the feed ingredient and explain with suitable example.

17. (a) Explain the feed mill layout and design with neat drawings.

Or

- (b) Write in detail about feeding of Japanese quail.

18. (a) Formulate poultry feed by using Least cost formulation.

Or

- (b) Describe the national and international regulations related to feed manufactures.

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**C-0061**

**Sub. Code**

**80132**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Third Semester**

**Poultry Science**

**PRINCIPLES OF POULTRY BREEDING**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Chromosome
2. Sex-linked Inheritance
3. Dominance
4. Hatchability
5. Mendelian law of segregation
6. Artificial insemination
7. American class
8. Outbreeding
9. Family selection
10. Vent sexing

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain briefly about the breed characteristics of Kadaknath.

Or

- (b) Write briefly about autosexing.

12. (a) Explain briefly about the law of independent assortment.

Or

- (b) Write briefly about tandem method of selection.

13. (a) Write briefly about hen day and hen housed egg production.

Or

- (b) Explain briefly about feed efficiency and livability in layers.

14. (a) Give a brief account of homozygous individuals.

Or

- (b) Write briefly about flock and pen mating in poultry.

15. (a) Explain briefly about genetic basis of variability.

Or

- (b) Explain briefly about heterosis.



**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on the sex linkage with examples.

Or

- (b) Describe in detail on most important characteristics of different classes of poultry.

17. (a) Describe in detail on the methods of selection in poultry.

Or

- (b) Describe in detail on common breeding programmes practiced in poultry industry.

18. (a) Explain in detail on selection of egg type lines.

Or

- (b) Describe in detail on the effects of inbreeding and outbreeding.

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**C-0062**

**Sub. Code**

**80133**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023**

**Third Semester**

**Poultry Science**

**BROILER BREEDER MANAGEMENT**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Biosecurity
2. Brooder
3. Breeder
4. Relative Humidity
5. Foot candle
6. Fertility
7. Hatching egg
8. Inbreeding
9. Crop score
10. Culling

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain briefly the preparation of shed for receiving the broiler chicks.

Or

- (b) Write briefly about sex separate rearing.

12. (a) Explain briefly about the flock uniformity.

Or

- (b) Write briefly about beak trimming in broiler breeders.

13. (a) Write briefly about hen day and hen housed egg production.

Or

- (b) Explain briefly about feed efficiency and livability in broiler breeders.

14. (a) Give a brief account of litter management.

Or

- (b) Write briefly about pedigree hatching in poultry.

15. (a) Explain briefly about selection of males for breeding.

Or

- (b) Explain briefly about grading of broiler chicks.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on the growing management in broiler breeders.

Or

- (b) Describe in detail on management of broiler breeders during summer and winter.

17. (a) Describe in detail on the good layer and non-layer.

Or

- (b) Describe in detail on records maintained in broiler breeder farms.

18. (a) Explain in detail on housing management of broiler breeders.

Or

- (b) Describe in detail on artificial insemination in broiler breeders.

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**C-0063**

**Sub. Code**

**80136**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Third Semester**

**Poultry Science**

**CLIMATE AND POULTRY PRODUCTION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Tropical
2. Humidity
3. Microclimate
4. Global warming
5. Heat stress
6. Pollutants
7. Livestock
8. Mean temperature
9. De-worming
10. Ventilation

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write about the climate classification system.

Or

- (b) Write short notes on:  
(i) polar front;  
(ii) polar vortex.

12. (a) Write the factors that influence climate change on birds microclimate.

Or

- (b) How to measure and control humidity?

13. (a) Brief the factors that affect poultry in-housed conditions.

Or

- (b) How does monsoon influence poultry production?

14. (a) Write the factor influence climate change on birds micro climate.

Or

- (b) Explain in brief about agro-meteorology.

15. (a) Explain the thermoregulatory mechanism of poultry birds.

Or

- (b) Write the internal climatic condition required for chick growth.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) How climate influence poultry production?

Or

- (b) Elaborate the physical components of air

17. (a) Explain in detail the physical and chemical heat regulations.

Or

- (b) Explain the mitigation of safety measures in poultry farm during disaster.

18. (a) Describe about the various strains that suit different climatic conditions.

Or

- (b) Write the importance of medications during extreme conditions.

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**C-0064**

**Sub. Code**

**80142**

**B.Sc., DEGREE EXAMINATION, NOVEMBER 2023.**

**Fourth Semester**

**Poultry Science**

**BROILER PRODUCTIONS**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Write the difference between broiler and layer.
2. Types of broiler production.
3. Broiler chick selection procedure.
4. Write the importance of growth monitoring during broiler production.
5. CFCR-abbreviate.
6. Write the different feed sizes of broiler commercial feed.
7. Name any two bacterial diseases in broiler.
8. Name any two viral diseases in broiler.
9. Write the importance of broiler meat processing.
10. What is HACCP?



**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss the multiple batch system for broiler production in India.

Or

- (b) Give a brief note on commercial strains of broiler.

12. (a) Briefly explain the different litter materials and their management during production.

Or

- (b) Discuss the infrastructure facilities required for brooding and growing in a commercial system.

13. (a) Explain the environmental parameters that influence the broiler production.

Or

- (b) Briefly describe the finisher management in broiler production.

14. (a) Discuss the major disease problems during the winter season in broiler production.

Or

- (b) Briefly explain the management of broiler production during monsoon season.

15. (a) Explain the importance of broiler meat processing.

Or

- (b) Write a note on marketing network of Suguna chicken in broiler Industry.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on the Indian status of the broiler industry.

Or

- (b) Discuss in detail the role of government and NGOs in the broiler industry.

17. (a) Write an elaborate note on broiler health management.

Or

- (b) Write a review on broiler feed management.

18. (a) Write a note on the Indian market and supply chain management for broiler meat.

Or

- (b) Discuss in detail the present and future of the processed chicken meat market in India.
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**C-0065**

**Sub. Code**

**80143**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023**

**Fourth Semester**

**Poultry Science**

**POULTRY DISEASES AND FLOCK HEALTH**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Ranikhet Disease.
2. Infectious Bronchitis.
3. Mycoplasmosis.
4. Salmonella.
5. Parasitic diseases.
6. Coccidiosis.
7. Biosecurity.
8. Sanitizers.
9. Medication.
10. Rodent control.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Differentiate between ILT and MD.

Or

- (b) Explain the morbidity mortality.

12. (a) Describe the prevention and control methods of bacterial diseases.

Or

- (b) Write short notes on Colibacillosis.

13. (a) Brief the Nutritional deficiency diseases.

Or

- (b) Explain the sanitation procedures.

14. (a) Describe the precaution and handling measure for flock health.

Or

- (b) Discuss about water sanitation in flock health.

15. (a) Discuss about pre and post vaccination care.

Or

- (b) Explain the vaccination schedule for Broiler.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Describe the classification of poultry diseases.

Or

- (b) Detail on differential diagnosis, treatment, prevention methods of bacterial poultry diseases.

17. (a) Comment on nutritional deficiency and metabolic parasitic diseases.

Or

(b) Give a detail comments on general farm hygiene in flock health.

18. (a) Explain in detail the feed vaccination principles.

Or

(b) Give a detail account on protozoan infection in poultry.

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**C-0066**

**Sub. Code**

**80151**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023**

**Fifth Semester**

**Poultry Science**

**LAYER PRODUCTION**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Layer.
2. Conventional cages.
3. Hen housed egg production.
4. Feed efficiency/dozen eggs.
5. Per capita availability of poultry meat in India and Tamilnadu.
6. Grower.
7. Egg cool room.
8. Fertility.
9. Clutch.
10. NECC.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write briefly about beak trimming in layers.

Or

- (b) Explain briefly about selection of males for layer breeding.

12. (a) Write briefly about fumigation in layer breeder hatchery.

Or

- (b) Compare between Hen Housed Egg Production and Hen day Egg production.

13. (a) Explain briefly about lighting management in layer breeders.

Or

- (b) Write briefly about selection of site for layer breeder farm.

14. (a) Explain briefly about vaccination schedule for layers.

Or

- (b) Write briefly about feeding management in layer breeders.

15. (a) Write briefly about monsoon management of layer chicks.

Or

- (b) Explain briefly about the egg collection in breeder farm.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on layer production standards.

Or

(b) Describe in detail on winter management of layer breeders.

17. (a) Describe in detail on the factors affecting egg weight.

Or

(b) Write an essay on National Egg Coordination Committee.

18. (a) Describe in detail on layer breeder male management.

Or

(b) Describe in detail on biosecurity measures followed in a layer farm.

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**C-0067**

**Sub. Code**

**80152**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Fifth Semester**

**Poultry Science**

**POULTRY PROCESSING, PRODUCTS TECHNOLOGY  
AND WASTE MANAGEMENT**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Egg shell Quality
2. Albumen Index
3. New York dressed weight
4. Catching of birds
5. Shrinkage
6. Soft scalding
7. Smoking
8. Giblet
9. Poultry manure
10. Egg size

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write briefly about loading and transportation of live birds for slaughter.

Or

- (b) Explain briefly about grading of Eggs.

12. (a) Write briefly about antemortem inspection of poultry.

Or

- (b) Explain briefly about nutritive value of poultry meat.

13. (a) Write briefly about dehydration of poultry meat.

Or

- (b) Explain briefly about codex alimentarius.

14. (a) Explain briefly about recycling of poultry manure.

Or

- (b) Write briefly about poultry rendering plant.

15. (a) Explain briefly about liquid waste management.

Or

- (b) Write briefly about composting.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on internal and external qualities of chicken egg.

Or

- (b) Write in detail on egg preservation methods.

17. (a) Write an essay on Slaughter and dressing of poultry.

Or

(b) Write in detail on preparation of ready-to-cook and ready-to-eat chicken.

18. (a) Write an essay on methods of carcass disposal.

Or

(b) Write detailed answer on Biogas generation.

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**C-0068**

**Sub. Code**

**80155A**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Fifth Semester**

**Poultry Science**

**POULTRY ECONOMICS AND MARKETING STRATEGY**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Production cost
2. Demand and supply
3. BROMARK
4. BCC
5. NMPPB
6. Shrinkage
7. Contract farming
8. Battery cage
9. HHEP
10. CPP

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What are the objectives of poultry marketing?

Or

- (b) How to calculate the production cost?

12. (a) Explain briefly about egg marketing channels.

Or

- (b) Write briefly about opportunities for marketing of value added products of boiler meat.

13. (a) Explain briefly about Layer contract farming.

Or

- (b) Write briefly about Layer farm records.

14. (a) Explain briefly about different types of farm records.

Or

- (b) Write briefly about broiler contract farming.

15. (a) Explain the feed efficiency for egg production.

Or

- (b) Write briefly about visual control system.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on the agencies involved in marketing of boiler meat.

Or

- (b) Discuss in detail on the agencies involved in marketing of chicken eggs.

17. (a) How broiler live birds are being marketed in Tamil Nadu.

Or

(b) Describe in detail on integration in poultry farming.

18. (a) Write in detail about the broiler performance parameters/indicators.

Or

(b) Write in detail about the layer performance parameters/ indicators.

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**C-0069**

**Sub. Code**

**80155B**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023**

**Fifth Semester**

**Poultry Science**

**COMPUTER APPLICATION AND ERP**

**(2019 onwards)**

Duration: 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Finding and replacing text
2. Printing
3. Graph
4. Animation
5. Power point
6. World wide web
7. Google
8. Email
9. Oracle
10. ERP.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write in brief about Build in functions.

Or

- (b) Explain briefly about MS office.

12. (a) Write briefly about concept of internet.

Or

- (b) Explain briefly about GL module.

13. (a) Write briefly about Cash/purchase module.

Or

- (b) Explain briefly about OPMF.

14. (a) Explain briefly about Worksheet.

Or

- (b) Write briefly about Office automation.

15. (a) What are the advantages of ERP?

Or

- (b) Explain briefly about applications of internet.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss in detail on the usage of computers in poultry automation.

Or

- (b) Write an essay on Human Resource Management System.



17. (a) Write an essay on Enterprise Resource Planning.

Or

(b) Discuss in detail on ERP software tools.

18. (a) Write in detail on basics and types of computer networks.

Or

(b) Write an essay on applications of internet.

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**C-0070**

**Sub. Code**

**80155C**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023**

**Fifth Semester**

**Poultry Science**

**DIVERSIFIED POULTRY AND RATITES  
MANAGEMENT**

**(2019 onwards)**

Duration: 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Indian runner
2. Incubation period
3. Broad breasted bronze
4. Toulouse
5. Variety
6. Brooder quail
7. Ratite
8. Mule duck
9. Debilling
10. Lavender.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write briefly about feeding management in layer ducks.

Or

- (b) Explain briefly about meat type ducks.

12. (a) Write briefly about incubation procedure for duck eggs.

Or

- (b) Explain briefly about Kuttanadu ducks.

13. (a) How will you differentiate the sex of turkey?

Or

- (b) Write briefly about goose liver production.

14. (a) Explain briefly about vaccination schedule for turkeys.

Or

- (b) Write briefly about the role of geese as weeders.

15. (a) Write briefly about Japanese quail enteritis.

Or

- (b) Explain briefly about duck plague.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write in detail on indigenous duck production practices in Kerala.

Or

- (b) Describe in detail on management of broiler quails.

17. (a) Describe in detail on the housing management of geese.

Or

- (b) Write an essay on comparison between ostrich and emu.

18. (a) Describe in detail on breeder management of turkeys.

Or

- (b) Write in detail on biosecurity measures followed in a turkey farm.

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**C-0071**

**Sub. Code**

**80155D**

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.**

**Fifth Semester**

**Poultry Science**

**LEGAL ASPECTS OF POULTRY BUSINESS**

**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Contract.
2. Types of companies.
3. Promoter.
4. Remuneration
5. Indian partnership act
6. Contract free consent.
7. Mutual party
8. Meetings
9. Manager
10. Indian partnership act

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain briefly about the transfer of property.

Or

- (b) What are the laws relating to poultry enterprise?

12. (a) Explain briefly about the compliance to mandatory standards in poultry processing plant.

Or

- (b) Write briefly about registration of partnership.

13. (a) Write briefly about provisions of company law for appointment of Manager.

Or

- (b) Differentiate between sale and agreement to sell.

14. (a) Explain briefly about sales of Goods act 1930.

Or

- (b) Write briefly about clearance from statutory bodies.

15. (a) What are Panchayat rules?

Or

- (b) Write briefly about legal formalities to start a new venture in poultry business.

**Part C**

(3 × 10 = 30)

Answer all questions.

16. (a) Discuss in detail on the sales of Goods Act 1930.

Or

- (b) Write in detail on Indian Legal System

17. (a) Write an essay on compliance to mandatory and voluntary standards in poultry farms.

Or

- (b) Discuss in detail on performance of the contract.

18. (a) Write in detail on Government of India Acts and Rules.

Or

- (b) Write an essay on distinction between company and partnership.

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**C-1216**

**Sub. Code**

**80113**

**B.Sc. DEGREE EXAMINATION, NOVEMBER – 2023**

**First Semester**

**Poultry Science**

**POULTRY PRODUCTION SYSTEMS, HOUSING AND  
AUTOMATION**

**(2023 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Section A**

(10 × 1 = 10)

Answer **all** the questions.

1. Poultry houses are constructed in an elevated area with a plinth of
  - (a) 0.6 m to 0.9 m
  - (b) 1 m to 1.2 m
  - (c) 1.2 m to 1.5 m
  - (d) 1.5 m to 1.8 m
  
2. In order to maximise benefit from natural ventilation, the poultry houses should be oriented with
  - (a) the short side exposed to wind
  - (b) the long side exposed to wind
  - (c) both (a) and (b)
  - (d) none of the above
  
3. The distance recommended for a poultry farm to be located away from public building like schools.
  - (a) 2 km
  - (b) 1 km
  - (c) 3 km
  - (d) 4 km



4. Construction coefficient of the poultry farm should be  
(a) 45% (b) 50%  
(c) 35% (d) 40%
5. The poultry houses must be cooled, when outside temperature exceeds  
(a) 29.4°C (b) 31.4°C  
(c) 21.1°C (d) 28.4°C
6. Poultry cages can be fixed from the ground level at  
(a) 60 cm (b) 45 cm  
(c) 30 cm (d) 70 cm
7. The temperature recommended during first week of brooding is  
(a) 95°F (b) 90°F  
(c) 85°F (d) 80°F
8. Which term refers to removal of all or part of the comb?  
(a) Debeaking (b) Dubbing  
(c) Both (a) and (b) (d) None of the above
9. Lubing nipple drinker has the passage rate of  
(a) 80 – 90 ml/min (b) 100 – 110 ml/min  
(c) 70 – 80 ml/min (d) 60 – 70 ml/min
10. Which equipment is used to inject different doses of vaccine to large number of birds in a shorter period?  
(a) Syringe with needle  
(b) Vaccine droppers  
(c) Automatic vaccinators  
(d) All of the above

**Section B**

(5 × 5 = 25)

Answer **all** the questions.

11. (a) What are the watering and feeding space requirements for different age groups of poultry?  
Or  
(b) Write about the terms used in poultry production.
12. (a) Explain briefly about comfort zone.  
Or  
(b) Write briefly about poultry farm plan.
13. (a) Explain briefly about litter management in poultry house.  
Or  
(b) Write briefly about slatted floor system.
14. (a) Explain briefly about foggers and sprinklers.  
Or  
(b) Write briefly about shovels and rocks.
15. (a) Explain briefly about automation in poultry housing.  
Or  
(b) Write briefly about automation in manure collection system.

**Section C**

(5 × 8 = 40)

Answer **all** the questions.

16. (a) Explain in detail in the various systems of poultry rearing.  
Or  
(b) Write a detailed answer on the alternate poultry production system.

17. (a) Explain in detail on the construction of poultry house.

Or

(b) Write in detail on poultry farm layout for broiler houses.

18. (a) Explain in detail on Insulation materials used in poultry housing.

Or

(b) Write a detailed answer about the fundamentals of ventilation.

19. (a) Define artificial insemination in poultry and explain about the AI equipment in poultry.

Or

(b) Explain in detail on ventilators, curtains and exhaust fans in poultry house.

20. (a) Explain in detail on automation in feed production.

Or

(b) Write a detailed answer on the advantages of automation in poultry production.

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**C-1217**

**Sub. Code**

**80115**

**B.Sc. DEGREE EXAMINATION, NOVEMBER – 2023**

**First Semester**

**Poultry Science**

**APPLIED AVIAN ANATOMY AND PHYSIOLOGY**

**(2023 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Section A**

(10 × 1 = 10)

Answer **all** the questions.

1. Brown egg shells are preferred in
  - (a) France
  - (b) India
  - (c) United States
  - (d) China
2. White skin is preferred in
  - (a) India
  - (b) France
  - (c) England
  - (d) USA
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. Heart rate in pigeon is
  - (a) 200 beats/min
  - (b) 210 beats/min
  - (c) 220 beats/min
  - (d) 230 beats/min
5. Which organ in birds synthesizes uric acid?
  - (a) Pancreas
  - (b) Liver
  - (c) Kidney
  - (d) Cloaca

6. Birds possess a pair of extra bones in the shoulder area which are called as  
(a) Corocoids (b) Keel bone  
(c) Breast bone (d) Medullary bone
7. The duration required for digestion in fowl laying hen for the feed to pass from the mouth to the cloaca  
(a) 1½ hrs (b) 2 hrs  
(c) 2½ hrs (d) 3 hrs
8. Amylase is secreted in which part of the digestive tract  
(a) Salivary glands in mouth  
(b) Pancrease  
(c) Small intestine  
(d) Crop
9. The hormone responsible for broodiness in chicken is  
(a) LH (b) FSH  
(c) Prolactin (d) Oxytocin
10. The hormone calcitonin is secreted by  
(a) ultimobronchial glands  
(b) parathyroid glands  
(c) thyroid glands  
(d) salivary glands

**Section B**

(5 × 5 = 25)

Answer **all** the questions.

11. (a) Explain briefly the contour feathers with a neat diagram.

Or

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

12. (a) Explain briefly about lungs, bronchi and their functions.

Or

(b) Write briefly about the types of blood vessels.

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

Or

(b) Write briefly about the role of kidneys and ureter.

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 harderian gland and spleen.

Or

(b) Write briefly about bone marrow and thymus.

**Section C**

(5 × 8 = 40)

Answer **all** the questions.

16. (a) Explain in detail on the integumentary parts of chicken and feather tracts.

Or

(b) Write a detailed answer on the comb patterns of chicken and role of scales and nails in poultry.

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

Or

(b) Write a detailed answer on the respiratory system of the chicken with a neat diagram.

18. (a) Explain in detail about pneumatic, medullary, cervical, thoracic, fused, wing and limb bones.

Or

(b) Explain the role of cloaca and the muscular system of chicken.

19. (a) Explain in detail on the egg 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) Write a detailed answer on normal physiological indices in chicken and hormones of the fowl.

Or

(b) Explain in detail about physiology of stress and adaptation in chicken.

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