

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3<sup>rd</sup> Year 2<sup>nd</sup> Semester Final Examination, 2008**  
**Subject: Poultry Production(Duck, Quail & Pigeon) (Theory)**  
**Course Code: PPR – 302**  
**Full Marks-70, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer any **Four** questions from each section of which question number **1 & 5** are **compulsory**. Use separate answer script from each section.)

### Section-A

- |    |   |   |
|----|---|---|
| 1. | Write the consequences of domestication of duck.  | 5 |
| 2. | (a) State feeding and rearing management of quail.  | 4 |
|    | (b) Mention special characteristics of rearing pigeon & write its feeding management.           | 6 |
| 3. | (a) Name the different breeds of geese. Write the identifying characteristics of Chinese geese. | 7 |
|    | (b) Write the utilization of grass by the geese.  | 3 |
| 4. | (a) Write down the unusual characteristics of Muscovy duck, Guinea fowl and Pigeon.             | 5 |
|    | (b) How the socioeconomic condition of rural people can be improved through duck rearing?       | 5 |
| 5. | (a) Write the zoological classification of Muscovy duck.  | 4 |
|    | (b) Muscovy is duck - Explain . What is mule duck?  | 6 |

### Section-B

- |     |  |       |
|-----|--|-------|
| 6.  | Describe the reproduction behavior of quail.                               | 5     |
| 7.  | (a) Write down the advantages of duck farming over chicken.                | 3     |
|     | (b) Give the scientific names of Turkey, Pigeon, Quail and Geese.          | 2     |
|     | (c) Write down the critical periods of embryonic development of duck eggs. | 3     |
|     | (d) What is integrated farming?  | 2     |
| 8.  | Write short notes on :   | 2.5 x |
|     | (i) Greer geese (ii) Pigeon milk (iii) Breeds of quail                     | 4 =10 |
|     | (iv) Khaki Campbell vs Jinding duck.                                       |       |
| 9.  | (a) Write in detail the feeds and feeding of ducks.                        | 6     |
|     | (b) What are the records that are maintained in a hatchery.                | 2     |
|     | (c) Give a note on 'sexing of duck'.                                       | 2     |
| 10. | (a) Mention the principles of rice husk incubation for hatching.           | 4     |
|     | (b) Mention the incubation periods of duck, quail, pigeon & geese.         | 4     |
|     | (c) What is herding system of duck rearing.                                | 2     |

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3<sup>rd</sup> Year 2nd Semester Final Examination' 2008**  
**Subject: Pathology of Infectious Diseases**  
**Course Code: PID-302**  
**Full Marks: 70, Time: 3 (Three) Hours**

(Figures in the right margin indicate full marks. Answer any 5 (Five) questions from each section.  
Use separate answer script for each section.)

**Section-A**

- 1.a) Differentiate the pathology of the following infectious diseases from each other: 3x2=6  
i) Rinderpest from Hemorrhagic Septicemia in Cattle  
ii) Anaplasmosis from Babesiosis  
iii) Canine Distemper from Canine Hepatitis.  
b) Write down the microscopic lesions of Para-tuberculosis. 1
- 2.a) Write down the gross and microscopic lesions found in Anthrax. 4  
b) Describe the lesions found in skeletal muscles in case of Black Quarter in a Calf. 3
3. Describe the pathogenesis and pathology of Tuberculosis (TB) in Ox. 7
4. Describe the pathogenesis and pathology of Bovine Viral Diarrhea and Mucosal Disease. 7
- 5.a) Write down the gross and microscopic lesions of FMD. 5  
b) How would you differentiate FMD from Vesicular Stomatitis? 2
6. Describe the pathogenesis and pathology of Rabies. 7

**Section-B**

- 7.a) Write short notes on any three of the followings: 3x2=6  
i) Verminous arteritis ii) Nuronophobia iii) Eosinophilia iv) Miyasis v) Gitter cell  
b) What do you mean by Negri-body? 1
8. Name an emerging disease of veterinary importance in Bangladesh and describe the pathology of it. 7
- 9.a) How edema is produced by the parasites *Haemonchus contortus* and *Fasciola gigantica*? 4  
b) Name the toxins released by Tetanus organism. How it produces the signs of Tetanus? 3
- 10.a) Write down the pathogenesis of Ring worm. 4  
b) Write a short note on Rhino-sporidiosis. 3
- 11.a) What is inclusion body? 1  
b) Write down the microscopic lesions of the following diseases: 2x3=6  
i) Brucellosis ii) Mastitis
12. Describe the pathogenesis and pathology of Canine Leptospirosis. 7

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**Chittagong Veterinary and Animal Sciences University**  
**DVM 3<sup>rd</sup> Year 2<sup>nd</sup> Semester Final Examination, 2008**  
**Subject: Poultry Nutrition (Theory)**  
**Course Code: PNT – 302**  
**Full Marks-55, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer any **THREE [3]** Questions from each section of which question number **1** is **compulsory**. Use separate answer script from each section.)

### Section-A

1. (a) What do you mean by mash and pellet feeding? Write down the advantages and disadvantages of mash feeding and pellet feeding. 5  
(b) Write down the nutritional requirements of layer starter and grower, broiler starter and broiler finisher ration. 5
2. (a) Define feed conversion ratio (FCR). Briefly discuss the factor affecting feed efficiency. 6  
3  
(b) Write down the effects of diets on egg quality.
3. (a) Define ration. Write down the essential steps needed during ration formation. 5  
(b) Give the importance the calorie-protein ratio and crude fiber in poultry ration. 4
4. (a) Define vitamin and feed additives. Classify feed additives with examples. 4  
(b) Write down the functions of fat soluble vitamins in poultry body. 5

### Section-B

5. (a) Define conventional and unconventional feed in poultry. What are the advantages of using unconventional feed ingredients in poultry ration. 5  
(b) Give a list of feeding system for poultry. Which feeding system would you prefer for feeding poultry and why? 4
6. (a) Define essential and limiting amino acid with example. Why essential amino acids are so important for poultry ration? 4  
(b) Describe briefly about the protein utilization by poultry. 5
7. (a) Describe the functions of different parts of poultry digestive system in poultry. 6  
(b) List the enzymes responsible for protein and fat digestion in poultry. 3
8. Write short notes on any three of the followings: 3X3 = 9  
(i) Nutrition of Breeders birds. (ii) Grit (iii) FCR (iv) Ca/ P ratio.

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3<sup>rd</sup> Year 2<sup>nd</sup> Semester Final Examination, 2008**  
**Subject: Pharmacology and Therapeutics (Theory)**  
**Course Code: PHT – 302**  
**Full Marks-55, Time: 3 Hours**



(Figures in the right margin indicate full marks. Answer any **Three** questions from each section of which question number **5** is **compulsory**. Use separate answer script from each section.)

### Section-A

1. a. What are antibiotics? Classify antibiotics on the basis of mechanism of action and spectra. 5.0  
b. Describe the factors influencing the chemical use of antibiotics. 4.0
2. a. Name the different types of cephalosporin. Describe the mode of action, uses, dosages and toxicities of oxytetracycline. 5.0  
b. Write down the uses, dosages and contraindications of prostaglandins, ecobolics and glucocorticoids. 4.0
3. a. Define and classify sulphonamides. Describe the mode of action, dosages and toxicities of combination therapy of sulphonamide and trimethoprim. 5.0  
b. Name the quinolones. Describe the mode of action uses and dosages of quinolones. 4.0
4. a. Write down the name of common antiseptics and disinfectants used in the poultry farm. 3.0  
b. List at least 10 antiviral drugs. 3.0  
c. Mention the name of antifungal drugs for topical applications. 3.0

### Section-B

5. a. Define chemotherapy. Write down the principles of chemotherapy. 3.0  
b. Write down the name of semi synthetic penicillin's. Describe the antimicrobial activity, uses, dosages and toxicities of ampicillin. 5.0  
c. Write down the criteria of an ideal antibiotic. 2.0
6. a. Clinical examination of a cow shows that she has an ovary with graffian follicle. She had received several AI but didn't conceive. What type of hormonal treatment you will prefer for this cow? 3.0  
b. Write down the different pharmacological preparations of calcium, phosphorus and magnesium used in Veterinary Medicine. 3.0  
c. Mention the name of available killed vaccines used in the Veterinary Medicine. 3.0
7. a. Write down the pharmacokinetic properties of benzyl penicillin. 3.0  
b. Define polypeptide antibiotics with their mode of action. 3.0  
c. Write down the dose schedule of polypeptide antibiotics in case of dog, cat and cattle. 3.0
8. Write down any three short notes of the following: 3×3= 9.0
  - i. Antibiotic resistance
  - ii. Oxytocin
  - iii. Probiotics
  - iv. Xenobiotics

(Figures in the right margin indicate full marks. Answer any **Three** questions from each section of which question number **1** and **5** are compulsory. Use separate answer script from each section.)

## Section-A

1. a. Define rhinitis and epistaxis. 2  
b. What are the causes of rhinitis and epistaxis? 4  
c. A cow was brought to you with bilateral nose bleeding, anorexia, restlessness, and decreased milk production. Give the line of treatment of that cow. 5
2. a. What are the common causes of esophageal obstruction? 3  
b. How will you differentiate tympanites from bloat? 4  
c. A heifer was brought to you with distended rumen, restlessness, respiratory distress, with a history of excess ingestion of green succulent grass. What is your presumptive diagnosis and line of treatment? 5
3. a. List the five common diarrheal diseases of ruminant with their etiological agents. 5  
b. Write down the principles and procedure of fluid therapy of a dehydrated sick cow. 7
4. Write down the line of treatment of the followings: 4X3= 12
  - (i) Aspiration pneumonia in a goat.
  - (ii) Conjunctivitis in a cow.
  - (iii) Hypovolemic shock in a bull.

## Section-B

5. a. Write down the clinical signs of epistaxis, photosensitization, and foot rot. 6  
A cow was brought to the SAQTVH with a history of ingestion of large amount of jackfruit. The cow was clinically found depressed with rectal temperature 99<sup>0</sup> F and profuse sour odored feces. What will be your diagnosis and line of treatment? 5
6. a. Classify colic. How could you differentiate various types of true colic? 6  
b. Classify and describe the followings: 3X2= 6
  - (i) Veterinary Medicine. (ii) Nephritis. (iii) Pneumonia.
7. Differentiate between the following conditions: 3X4= 12
  - (a) Hyperkeratosis and dyskeratosis.
  - (b) Emphysema and empyema.
  - (c) Cystitis and pyelonephritis.
  - (d) Dermatomycosis and dermatophilosis.
8. Write short notes on: 3X4= 12
  - (a) Congestive heart failure.
  - (b) Allotriophagia.
  - (c) Cud – dropping syndrome.
  - (d) Lymphadenitis.

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3rd Year 2<sup>nd</sup> Semester Final Examination, 2008**

**Subject: Immunology and Serology (Theory)**

**Course Code: IMS – 302**

**Full Marks-55, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer **THREE [3]** Questions from Section A and **THREE [3]** Questions from Section B of which **Question No. 5 is compulsory**. Use separate answer script for each section.)

## **Section-A**

1. Define natural and acquired immunity. Discuss basic phenomenon of immune response. Describe different types of host resistance. 2+3+4=9
2. Define PCR. Discuss reverse transcription polymerase chain reaction. Discuss the roles of PCR in disease diagnosis. 2+3+4=9
3. With labeled diagram compare the structures of IgE and IgD. What is fluorescent antibody test? Describe the principles and protocols for direct and indirect fluorescent antibody tests. 4+1+4=9
4. With labeled diagram describe the domain structures of a T cell receptor (TCR). Define hypersensitivity. What are cytokines and how they differ from hormones? Write the names and functions of different kinds of cytokines encountered in animal cells. 3+1+2+3=9

## **Section-B**

5. (a) How exogenous and endogenous antigens are processed in an animal body? 5  
(b) Write down the principle of hemagglutination inhibition test. 2  
(c) What are the biologic properties of a good antigen? 3
6. (a) List the functions of different kinds of cells involved in the process of immunity in an animal body. 4  
(b) Give the features of primary and secondary lymphoid organs of immune response. 2  
(c) Differentiate different kinds of MHC molecules for antigen presentation. 3
7. (a) Give the mechanism involved in developing auto-immune diseases. List some auto-immune disorders recorded in animals and humans. 5  
(b) What are the immunological components of graft rejection? Explain renal allograft. 4
8. Write short notes on (Any three): 3X3=9
  - (a) Molecular antibody
  - (b) Incomplete antigen
  - (c) Vaccine failure
  - (d) Anamnestic response

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3<sup>rd</sup> Year 2nd Semester Final Examination' 2008**  
**Subject: Parasitology (Protozoology)**  
**Course Code: PRT-302**  
**Full Marks: 70, Time: 3 (Three) Hours**

(Figures in the right margin indicate full marks. Answer any 5 (Five) questions from each section. Use separate answer script for each section.)

**Section-A**

- 1.a) List the different types of Leishmaniosis with causal agents and vectors in Dog. 2
- b) Briefly describe the different developmental forms of Leishmania. 2
- c) "Spectacles developed around the eyes of Dog due to depletion of hair"- which form of Leishmaniosis is found in this condition? Write down the pathogenesis of the Leishmaniosis. 3
- 2.a) Name 4 blood protozoa of Cattle. 1
- b) Briefly describe the pathogenic significance of Babesiosis in Cattle. 4
- c) What type of measure will you take to control Babesiosis in a herd? 2
- 3.a) Briefly describe the ways of transmission of following protozoa: 3  
i) *Trypanosoma equiperdum* ii) *Trichomonas columbae* iii) *Babesia bigemina*
- b) What do you mean by 'Cerebral Babesiosis'? How can it occur in Dog? 4
- 4.a) Briefly describe the life cycle of *Entamoeba histolytica*. 4
- b) Name 3 zoonotic food-and water-borne protozoa. Write down the pathogenic significance of them. 3
- 5.a) Which rickettsiale is known as leucocytophilic bacteria? Write down the clinical signs raised by the infection in Dog. 3
- b) List the cyst (containing bradyzoites) forming coccidian protozoa. How can you differentiate among them on the basis of oocyst? 4
6. Write short notes of the followings: 3.5x2=7  
a) Sarcocystis b) General morphology of protozoa

**Section-B**

- 7.a) Compare the important features of the life cycles of Plasmodium and Cryptosporidium. 5
- b) Discuss the pathogenesis of Black-head disease in Poultry. 2
- 8.a) Discuss about auto-infection in relation to Cryptosporidiosis. 1
- b) Briefly describe with neat diagram the life cycle of *Eimeria taenella*. 3
- c) List the epidemiological factors for Chicken Coccidiosis in Bangladesh. 3
- 9.a) List the risk factors associated with the following protozoan infections: 3  
i) *Theileria annulata* ii) *Toxoplasma gondii*
- b) Briefly describe the life cycle of the most pathogenic protozoan that causes Coccidiosis in Calf. 4
- 10.a) How can you diagnose the following protozoan infections in a parasitology lab.? 3  
i) *Anaplasma marginale* ii) *Theileria parva* iii) *Trypanosoma cruzi*
- b) Name 5 protozoa which cause abortion in animal. How can you prevent them? 4
- 11.a) Differentiate between the following terms: 4  
i) Cilium and Flagellum ii) Vesicular and Compact type of nuclei iii) Holozoic and Saprozoic nutrition iv) Trophozoite and Cyst of *Balantidium coli*
- b) Show the zoological classification of veterinary important protozoa. 3
12. Write short notes of the followings: 3.5x2=7  
a) Haemoproteus b) *Trichomonas foetus*