

**Chittagong Veterinary and Animal Sciences University**  
**DVM Third Year Second Semester Final Examination, 2011**

**Course Title: Parasitology (Protozoology) (Theory)**

**Course Code: PRT-302**

**Full Marks – 70; Time: 3 hours**

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

### Section-A

- 1 a) Define Protozoa. Describe the sexual reproduction and locomotion of protozoa. 5.0  
b) Draw and label the cystic and trophozoite form of a typical ciliate. 2.0
- 2 a) Make a list of the pathogenic coccidian parasites of chicken with their location in the host. 3.0  
b) Briefly describe the pathogenic significance and control of chicken coccidiosis. 4.0
- 3 a) Draw and label the sporulated Oocysts of *Eimeria* spp., *Isospora* spp., *Cryptosporidium* spp. and *Wenyonella* spp. 4.0  
b) How will you control Cryptosporidiosis in calf? 3.0
- 4 a) Make a list of the protozoa that cause abortion in man and animals. 2.0  
b) Briefly describe the life cycle, pathogenic significance and control of *Toxoplasma gondii* infection. 5.0
- 5 a) Enlist the haemoprotozoa of poultry. 2.0  
b) Briefly describe the pathogenic significance of leukocytozoonosis in poultry. 3.0  
c) How will you control haemoprozoan infection in birds? 2.0
- 6 a) What is "Black head disease"? Why is it so called? 2.0  
b) Briefly describe the life cycle, pathogenic significance and control of histomoniasis in turkey. 5.0

### Section-B

- 7 a) Briefly describe the developmental stages of *trypanosome* sp. 3.0  
b) List five different water borne zoonotic protozoa. What measures should be taken to control such infection in man and animals. 4.0
- 8 a) Name the species of *Theileria* that cause diseases in cattle. Briefly describe the morphology and epidemiology of *Theileria parva* infection in cow. 4.0  
b) Write down the life cycle of *Theileria parva* infection in cow in sketch form. 3.0
- 9 a) Enlist the different forms of Leishmaniasis with their causal agents. 2.0  
b) Describe the epidemiological factors of babesiosis. 3.0  
c) Write down the pathogenesis of babesiosis in cow. 2.0
- 10 a) Draw and label a typical *Tritrichomonas foetus*. 2.0  
b) Briefly describe the morphology and pathogenicity of *Tritrichomonas foetus* in cattle. 3.0  
c) Write down the prevention and control of *Tritrichomonas foetus* in cattle. 2.0
- 11 a) Differentiate between the following terms: (i) Trophozoite and cyst of *Balamtidium coli* (ii) Cilium and flagellum (iii) Vesicular and compact type of nuclei 3.0  
b) Coccidiosis is a "Self-limiting disease"-Justify the statement. 3.0  
c) Name the causal agent of "Dourine". 1.0
- 12 Write short note Any two (2): 3.5X2=7.0  
a) Surra in horse b) Anaplasmosis in cattle c) Ehrlichiosis in dog.

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3rd Year 2nd Semester Final Examination, 2011**  
**Subject: Pathology of Infectious Diseases (Theory)**  
**Course Code PID - 302**  
**Full Marks: 70, Time: 3 Hours**

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

### Section-A

1. a) Name six important viral diseases of ruminants in Bangladesh with their etiology. 3.0  
 b) Write down the pathology of tiger heart disease in calves. 2.0  
 c) What are the sequelae of foot and mouth disease (FMD) in cattle? 2.0
2. a) Enlist five important fungal diseases of man and animals with their etiology. 2.0  
 b) Write down the pathogenesis and pathology of *Aspergillus abortus* infection in cow. 3.0  
 c) Write down the sources and pathology of aflatoxicosis in cattle. 2.0
3. a) Discuss the pathogenesis, pathology and diagnosis fascioliasis in cattle. 5.0  
 b) Write down the gross and microscopic lesions of dermatomycosis. 2.0
4. Differentiate between (any two) : 3.5X2= 7.0  
 a) Actinobacillosis and Actinomycosis  
 b) Strongyles and Glanders  
 c) Canine distemper and infectious canine hepatitis
5. a) What is granulomatous disease? List four granulomatous diseases. 2.0  
 b) Discuss the pathogenesis, pathology and diagnosis of an important bacterial diseases in cattle related to granulomatous inflammation. 5.0
6. a) Briefly state the etiology, pathogenesis and diagnosis of rabies in dogs. 5.0  
 b) Differentiate rabies from pseudorabies in swine. 2.0

### Section-B

7. a) Briefly describe the epidemiology, transmission and pathogenesis of BVD and mucosal disease complex in calf. 5.0  
 b) Formulate a table for the differential diagnosis of vesicle forming disease in food animals. 2.0
8. a) Explain how *Brucella abortus* and *Chlamydia* spp induce abortion in pregnant animal. 4.0  
 b) Mention the characteristic features of aborted fetus in brucellosis, listeriosis and fungal abortions. 3.0
9. a) Write down the pathological significance of hydatidosis in affected animal. 2.0  
 b) Describe the pathogenesis and pathology of verminous pneumonia in cattle. 5.0
10. a) Write down the occurrence, pathogenesis and pathology of PPR. 5.0  
 b) What are the pathognomonic lesions of BSE and papillomatosis? 2.0
11. a) Briefly discuss the pathology of anthrax and black quarter with their differential diagnosis. 5.0  
 b) Enumerate the diseases caused by preformed microbial toxins. Why deep punctured wound is necessary to develop tetanus? 2.0
12. Write short notes on (any two): 3.5 X 2= 7.0  
 a) Para TB in cattle  
 b) Babesiosis  
 c) Mastitis in goat

(D)

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3rd Year 2nd Semester Final Examination, 2011**  
**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** questions from each section of which question no. **five** is compulsory. Use separate answer script for each section.

### Section-A

1. a) Define and classify feed additives. 2  
b) Name five commonly used feed additives in poultry with their mode of action. 3  
c) Use of antibiotic growth promoter in poultry diet is hazardous for human health-explain. 4
2. a) Define and classify vitamins. 2  
b) Write down the deficiency symptoms and remedies of vitamin D, E and B<sub>12</sub> in poultry. 5  
c) Illustrate the importance of maintaining calcium-phosphorus ratio in layer diet. 2
3. a) Define mineral. Mention some natural and synthetic sources of mineral for poultry. 3  
b) Write down the function and deficiency symptoms of calcium, phosphorus, manganese and iron. 6
4. a) Define feeding, choice feeding and phase feeding. 3  
b) Describe the importance of pellet feeding over mash feeding in poultry. 3  
c) Which feeding system will you follow for a commercial layer farm and why? 3

### Section-B

5. Suppose you have five hundred broilers. How much feed will be required (Maize, Soybean meal, Rice polish and meat and bone meal) from day old up to 5<sup>th</sup> weeks of age, where average FCR value will be 1.60. 10
6. a) Write down the principles of poultry feeding. 3  
b) Classify poultry feed ingredients according to nutrient values with examples and also mention their energy, protein values. 3  
c) What do you mean by feed conversion? Which factors influence the feed conversion. 3
7. a) Write down the nutrient requirements of broiler grower and layer-layer ration. 3  
b) What do you mean by feeding system of poultry? Write down the procurement and storage of poultry feed. 6
8. Write short notes on 3X3  
a) Cage layer fatigue. b) Calorie-protein ratio. C) Digestive physiology of chicken. =9

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3rd Year 2nd Semester Final Examination, 2011**  
**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** questions from each section of which questions **No. 1** is compulsory. Use separate answer script for each section.

### Section-A

- |    |   |   |
|----|---|---|
| 1. | a) Define immunoglobulin.                                 | 2 |
|    | b) Give a brief note on the classes of immunoglobulins.   | 5 |
|    | c) Describe how immunoglobulins are produced in the body. | 3 |
| 2. | a) What is immunity?                                      | 2 |
|    | b) Describe different types of immunity.                  | 5 |
|    | c) Mention the basic mechanism of immune response.        | 2 |
| 3. | a) What is hypersensitivity reaction? Classify it.        | 3 |
|    | b) What do you mean by helper T cells?                    | 2 |
|    | c) How can you differentiate Th1 cells from Th2?          | 4 |
| 4. | a) Name five serological tests.                           | 2 |
|    | b) Describe the principle of ELISA with diagram.          | 4 |
|    | c) Write down the uses of HA and HI tests.                | 3 |

### Section-B

- |   |   |   |
|---|---|---|
| 5 | a) What do you mean by MHC molecules? Differentiate between class I and class II MHC molecules. | 4 |
|   | b) Discuss class II MHC pathway of antigen processing.  | 5 |
| 6 | a) List some important cytokines which mediate immune response.                                 | 2 |
|   | b) Describe the roles of TNF- $\alpha$ , $\gamma$ IFN and IL-2                                  | 5 |
|   | c) Mention the biological properties of cytokines with examples.                                | 2 |
| 7 | a) Define vaccine.  | 2 |
|   | b) Discuss different types of vaccine with examples.  | 4 |
|   | c) What do you mean by adjuvant? Describe some common adjuvant with their modes of action.      | 3 |
| 8 | a) Define antigen.  | 2 |
|   | b) What are the factors that influence immunogenicity of an antigen?                            | 3 |
|   | c) Describe the procedure of monoclonal antibody production with its uses.                      | 4 |

Chittagong Veterinary and Animal Sciences University  
DVM 3rd Year 2nd Semester Final Examination, 2011

Subject: General Medicine (Theory)

Course Code: GMD-302

Full Marks: 70, Time: 3 Hours

(65) (Figures in the right margin indicate full marks. Answer any **THREE** questions from each section of which question no. **one and five** are compulsory. Use separate answer script for each section)

### Section-A

1. a) What are the different senses of the word 'Medicine'? 3.0  
b) Enumerate the principles of disease diagnosis. 4.0  
c) List different methods of drug application. 4.0
2. a) A Jamunapari goat is suffering from complete anorexia, ruminal atony and depression. It has consumed large amount of cooked rice. Write down the presumptive diagnosis and treatment of it. 5.0  
b) What are the possible infectious agents causing stomatitis? How can you treat it? 3.0  
c) Define choke. Write down the intra-luminal causes of it. How can you correct it non-surgically? 4.0
3. a) What are the characteristic signs of dyspneic cattle? 2.0  
b) Enumerate causes of aspiration pneumonia in cattle. 3.0  
c) Write down the principles of treatment of respiratory diseases. 4.0  
d) Define pityriasis, parakeratosis, impetigo, alopecia, urticaria and corneal opacity. 3.0
4. a) What are the major manifestations of urinary tract diseases? 3.0  
b) Differentiate haematuria and haemoglobinuria. 2.0  
c) Write down the risk factors and common lodgment sites of urolithiasis in goat. 4.0  
d) Differentiate glomerulonephritis, interstitial nephritis and pyelonephritis. 3.0

### Section-B

5. a) Define veterinary medicine. Briefly describe the scopes and history of it from Bangladesh perspective. 5.0  
b) Define colic. What are the signs of colic in horse? How can you treat it? 4.0  
c) How can you treat a patient suffering from jaundice? 2.0
6. a) Name the common stressors. What may be the consequences of stressed animal? How can you overcome them? 4.0  
b) Rectal temperature of a cow is 106 F. How will you diagnose whether the patient is suffering from fever or heat stroke? 4.0  
c) Define dehydration. What are the common causes of it? How can you compensate dehydration? 4.0
7. a) Differentiate epistaxis, hemoptysis and hematemesis. Write down the common treatment of them. 4.0  
b) What are the common disorders of cardiovascular system in animal? Write down the treatment procedure of shock and anaphylaxis. 4.0  
c) Write down the principles of treatment of skin diseases. 4.0
8. a) What are the common signs of nervous disorders? Write down the principles of treatment of nervous exciting disorders. 4.0  
b) Write down the causes of osteodystrophy, osteomyelitis and synovitis. How can you treat an animal suffering from rickets? 4.0  
c) What are the signs of conjunctivitis, cataract, otorrhoea and foot rot? How can you treat an animal suffering from foot rot? 4.0

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3rd Year 2nd Semester Final Examination, 2011**  
**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 no. **one** is compulsory. Use separate answer script for each section.

### Section-A

1. a. Classify antibiotics according to their mode of actions with examples. 4  
b. Write down the generic name of five bacteriostatic and five bacteriocidal antibiotics with their doses. 4  
c. List the factors influencing clinical uses of antibiotics. 2
2. a. Write down the therapeutic weakness of benzylpenicillin. Mention the antibacterial activity, action and use of amoxicillin. 4  
b. Give the generic name of three first generation, three second generation and one third generation of cephalosporines. 3  
c. Write down the action and uses of cloxacillin. 2
3. a. Write down the characteristics of aminoglycoside. Mention three enzymes responsible for their bacterial resistance. 3  
b. Discuss briefly about the toxicity and clinical application of gentamycin. 3  
c. Write short notes on tylosin. 3
4. a. Write down the characteristics of an ideal anthelmintic. 2  
b. Name three anthelmintics which are effective against all three classes of parasites (trematode, cestodes and nematode) 3  
c. Write down the mode of actions, doses and toxicities of ivermectin and piperazine. 4

### Section-B

5. a. Classify sulphonamides according to duration of action. 3  
b. Give three examples of potentiated sulphonamides. Write down the mode of action and clinical uses of potentiated sulphonamides. 4  
c. Write down the benefits of the combination of different sulphonamides and trimethoprim. 2
6. a. Write salient characteristics of polypeptide antibiotics. 3  
b. Write down the mode of action, clinical uses of different combinations and preparations of polypeptide antibiotics. 3  
c. Write five antifungal drugs with their area of uses. 3
7. a. Write down the differential points among piperazine, thiabendazole, mebendazole, albendazole and fenbendazole in a tabular form. 3  
b. Write down the important considerations to use anticestodal drugs. 2  
c. Write down the therapeutic uses, pharmacokinetics, doses and toxicity of niclosomide. 4
8. a. What are the prime schedules of uses of anticoccidial drugs? 2  
b. Classify anticoccidial drugs with one example of each. 4  
c. Write two antibabesial and two antitheilerial drugs with their doses and routes of administration 3

**Chittagong Veterinary and Animal Sciences University**  
**DVM 3rd Year 2nd Semester Final Examination, 2011**  
**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 **THREE (3)** questions from each section of which question no 1 and 5 are compulsory. Use separate answer script for each section.

### Section-A

1. (a) Classify duck breeds based on utility with example. 2.0  
(b) Discuss breed characteristics of one famous egg producing breed in Bangladesh cortex. 4.0  
(c) Describe the prospectus of duck production in Bangladesh. 6.0  
(d) Write down the differences between wild mallard duck and muscovy duck. 3.0
2. (a) State the common disease of duck. How you will take preventive measures of a duck farm. 7.0  
(b) How you will select duck eggs for hatching? 3.0
3. (a) How can you classify quail? 2.0  
(b) Describe the peculiar characteristics to quail. 3.0  
(c) Briefly describe quail rearing system in Bangladesh. 5.0
4. (a) State the special characteristics of pigeon rearing. 2.0  
(b) Briefly describe feeding and nutrition of pigeon. 5.0  
(c) What is squab meat? Write down the composition of the squab meat. 3.0

### Section-B

5. (a) What are the constraints that you have observed during the field trip in Sonagazi duck farm, Feni? Explain briefly. How can you over come those constraints? 7.0  
(b) Make a sketch of Sonagazi duck farm. 4.0  
(c) How will you differentiate duck from drake? 2.0  
(d) What is mule duck? 2.0
6. (a) Classify breeds of geese. 2.0  
(b) Briefly describe feeding, fattening and marketing of geese. 5.0  
(c) What are the main constraints of geese production in Bangladesh? Explain briefly. 3.0
7. (a) Write down the differences between male quail and female quail. 3.0  
(b) What are the varieties of Japanese quail? Briefly describe. 3.0  
(c) Do you think quail farming is profitable in our country? Justify your options. 4.0
8. Write short notes (any four) 2.5x 4=10.00  
(a) Vaccination schedule of duck farm.  
(b) Incubation of duck egg.  
(c) Sexing of duck.  
(d) Duck domestication.  
(e) Bob white quail.  
(f) Problem of pigeon rearing.