

Figures in the right margin indicate full marks. Answer 3 (three) questions from each section of which Question No 1 and 5 are compulsory. Use separate answer script for each section.

Section-A

1. a. List the diseases of alimentary tract dysfunction. 02
b. Write down the principles of treatment of alimentary tract dysfunction. 04
c. A bullock is suffering from toxemia, dehydration, ruminal stasis, weakness and recumbency due to ingestion of large amount of ripe paddy. Diagnose the case and write its line of treatment. 05
2. a. Write down the methods of diagnosis of diseases of the urinary system. 04
b. What is urolithiasis? Sketch the factors responsible for urolithiasis in a bullock. 06
c. Which animals are more susceptible for urolithiasis and why? 02
3. a. What is "walking pneumonia?" Classify pneumonia in animals. 04
b. A calf is suffering from a serious disease due to careless drenching during medication. Diagnose the disease and write down its remedy. 06
c. How will differentiate epistaxis from hemoptysis? 02
4. a. Write down the predisposing factors and signs of pododermatitis in animal. How can you treat it? 06
b. What do you mean by simple indigestion? 01
c. A goat has come to the Veterinary Hospital suffering from anorexia and ruminal atony. Clinical examination revealed that ruminal pH is nearly 5. What is presumptive diagnosis? How can you treat the case? 05

Section-B

5. a. Define Veterinary Medicine. 01
b. Write down the principal manifestation of GIT dysfunction with specific etiology. 05
c. Differentiate fever from hyperthermia. How can you treat a patient suffering from hypovolemic shock? 05
6. a. Define icterus. What are the signs of it? What are the general management of icteric patient? 04
b. Write down the principles of diagnosis and treatment of skin diseases. 04
c. What are the causes of bacterial and verminous pneumonia? How can you differentiate parasitic pneumonia from aspiration pneumonia? 04
7. a. Mention the special examination of cardiovascular systemic diseases. 02
b. Define anemia. Briefly describe the classification of anemia with treatment in animals. 06
c. How will you differentiate different types of anemia? 04
8. Write down the line of treatment of following conditions: 2X6 = 12
a. Conjunctivitis in cow.
b. Stomatitis in goat.
c. Choke in cattle.
d. Cystitis in cow
e. Myopathy in cow
f. Fever in bull.

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Section-A

1. (a) Describe the general features of a protozoan parasite and classify the protozoa on the basis of morphological characteristics. 3
(b) Define the free living and parasitic protozoa with example. 2
(c) Can a free living protozoa become parasitic to its host? Explain. 2
2. (a) Describe in brief the developmental forms of *Leishmania*. 2
(b) List the different types of leishmaniasis with causal agents and vectors in dog. 3
(c) Do you think a vaccine made from a protozoan will confer strong immunity against the corresponding infection? 2
3. (a) Compare between the life cycles of *Cryptosporidium* and *Plasmodium*. Describe briefly the mode of transmission of these diseases. 4
(b) Discuss the pathogenesis of *Histomonas meleagridis* infection in poultry. 3
4. (a) Name the important blood protozoa affecting cattle. 1
(b) What are the unique features of *Cryptosporidium* compared to other coccidia. 2
(c) Discuss the epidemiologic features of trypanosomiasis. 4
5. (a) Name five protozoa causing abortion in animals. How will you prevent them? 3
(b) Differentiate:- 4
 - i. Holozoic and saprozoic nutrition
 - ii. Flagellum and cilium
 - iii. Cyst and trophozoite
 - iv. Schizogony and gametogony
6. (a) Draw and label a typical protozoa. 1
(b) Write short notes on (any two) :- 6
 - i. Neosporosis
 - ii. Giardiasis
 - iii. Sporocyst and sporozoite

Section-B

7. (a) What are the principal differences between the life cycles of *Babesia sp.* and *Theileria sp.* 4
(b) Describe the pathology of theileriosis in cattle. 3
8. (a) List the coccidian infecting poultry in Bangladesh. 2
(b) Describe "Shuttle programme" to control coccidiosis in Bangladesh. 2
(c) How will you prevent chicken coccidiosis from a poultry farm? 3
9. (a) Define endemic stability and instability. Outline the life cycle of *Anaplasma sp.* 3
(b) Discuss the epidemiology and risk factors of bovine babesiosis. 4
10. (a) Draw and label different developmental stages of trypanosome life cycle. 3
(b) Write short note on 'Surra' 4
11. (a) List 10 different zoonotic protozoa with their vectors. 3
(b) Outline the life cycles of *Toxoplasma gondii* and mention its pathogenesis. 4
12. (a) What is sequestration? In which parasitic infection it may be found? 3
(b) Mention the causal agents of- 4
 - i. Liver abscess in poultry
 - ii. Cerebral babesiosis in cattle
 - iii. Visitors diarrhea in human
 - iv. Dourine in horse
 - v. Winter coccidiosis in cattle
 - vi. PKADL in dog
 - vii. Calf-hood scour
 - viii. Black disease in turkey

Chittagong Veterinary and Animal Sciences University

DVM 3rd Year 2nd Semester Final Examination, 2009

Subject: Pharmacology and Therapeutics (Theory)

Course Code: PTH-302 ✓

Full Marks-55, Time: 3 Hours

Figures in the right margin indicate full marks. Answer any 3 (three) questions from each section of which question no 1(one) and 5 (five) are compulsory. Use separate answer script for each section.

Section-A

1. Write short notes on (any six): 6x1.5
=9
 - a) LD-50, b) Half life, c) Synergism, d) Antagonism, e) Potentiation, f) Bacteriostatic
 - g) Bactericidal, h) Minimum Inhibitory Concentration (MIC).
2.
 - (a) What is antibiotic? Give mode of action of antibiotic. 3
 - (b) What are the factors influence the clinical use of antibiotic? 3
 - (c) Name at least 3 bacteriostatic antibiotics and 3 bactericidal drugs. 3
3.
 - (a) What do you mean by therapeutics, chemotherapeutics and chemotherapeutic index? 3
 - (b) Write down the mode of action of the followings: 3x2=
 - i) Cotrimoxazole, ii) Levofloxacin, iii) Gentamycin. 6
4.
 - (a) What are the characters of an ideal anthelmintic drug? 3
 - (b) Describe the mode of action of levamisole. 3
 - (c) What types of antimicrobial are indicated for treatment of infection with *Giardia*? 3

Section-B

5.
 - (a) Define cleansers, antiseptics, disinfectants and preservatives. 4
 - (b) What are the use of antiseptics and disinfectants in veterinary practices? 3
 - (c) Give the role of surfactants and detergents. 3
6.
 - (a) What do you mean by β -lactamase antibiotic? Write the name of two β -lactamase resistant penicillin with their trade name and dose in case of cattle. 3
 - (b) Which antibiotic, once widely used in small and large animals, is now completely banned from use in food animals and why? 3
 - (c) Do antimicrobials that affect DNA are safe for use in people and animals? Explain. 3
7.
 - (a) Define fluid therapy. What are the routes of fluid administration? Make a table for fluid and electrolyte disorders and fluids used in their correction. Write the composition of solutions used in fluid therapy. 5
 - (b) Classify systemic antifungal drugs. Which organ is almost always adversely affected by amphotericin -B during treatment of deep mycosis? 4
8. Write short notes on (any three): 3x3=
 - a) Herbal drugs 9
 - b) Feed additives
 - c) Residual effects of antibiotics
 - d) Third generation cephalosporin

Chittagong Veterinary and Animal Sciences University

DVM 3rd Year 2nd Semester Final Examination, 2009

Subject: Poultry Nutrition (Theory)

Course Code: PNT-302

Full Marks-55, Time: 3 Hours

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Section-A

1. (a) Name of the following standards available to feed poultry. Which one would you follow in formulating broiler diet and why? Give the requirements of ME, CP, Ca and P for layer. 4
(b) Distinguish between "Quality feed" and "Balanced ration" State the points to be considered in formulating a balance diet for laying hen? 5
2. (a) Write down the nutritional differences between a broiler (finisher) and layer (peak egg production) diet. 4
(b) What are feed additives? Give a list of feed additives commonly used in poultry ration and narrate the mode of action of antibiotics. 5
3. Briefly discuss the evaluation of feed ingredients. 9
4. Write shorts notes on (any three) 3 x 3 = 9
(a) Cage layer fatigue
(b) FCR
(c) Interrelationship among Ca, P and Vitamin D
(d) Mineral deficiency in poultry birds.

Section-B

5. (a) Describe the role of vitamin 'B' complex in poultry birds. 4
(b) Write down the physiological function and deficiency symptoms of vitamin A, D and E in poultry birds. 6
6. (a) Define calorie-protein ratio. Mention the importance of calorie-protein ratio in poultry ration formulation. 4
(b) Distinguish between "conventional" and "un-conventional" feed stuffs. Write down the usefulness and limitation of using un-conventional feeds in poultry ration. 5
7. (a) Define pellet. Write down the advantages of pellet feeding over mash feeding. 5
(b) Discuss about the preservation of poultry feed ingredients. 4
8. (a) Write down the distribution of energy incase of Avian species. 4
(b) Define essential and limiting amino acids with example. Why essential amino acids are so important for poultry ration. 5

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

Section-A

1. Describe the pathogenesis of anthrax and paratuberculosis in animals 7
2. Write down the microscopic lesions found in listeriosis and actinomycosis in animals 7
3. How would you diagnose the following diseases (any two) 7
 - i. Brucellosis
 - ii. Leptospirosis
 - iii. Canine distemper
4. a) Write down the gross and microscopic lesions of PPR. 3
b) Describe the pathogenesis of rabies. 4
5. a) Write down the pathogenesis and pathology of ringworm infection in calf. 3
b) Write a short note on echinococcosis. 4
6. a) Draw and label a typical tubercle. 1
b) Write short notes on- (any two) 6
 - i. Environmental mastitis
 - ii. Papillomatosis
 - iii. Swine dysentery

Section-B

7. a) What are the disease conditions produced by *Clostridium perfringens*. Write down the pathology and pathogenesis of enterotoxemia. 4
b) Briefly describe the lesions produced by bovine histoplasmosis. 3
8. a) Enlist some intracellular bacteria and some pathogens causing granulomatous lesions. 1
b) Differentiate the following- 6
 - i. Wooden tongue and Lumpy jaw
 - ii. Tuberculosis and paratuberculosis
 - iii. Abortion due to *Listeria* and *Brucella*
9. a) How can you differentiate between the following conditions? 4
 - i. Anemia due to babesiosis and anaplasmosis
 - ii. Edema due to fasciolosis and haemorrhagic septicemia
b) What are the gross and microscopic lesions of "Marble lung disease"? 3
10. a) Write down the pathology caused by lungworm in cattle. 3
b) Mention the pathology of chronic fasciolosis. 4
11. a) What are the factors affecting the pathogenicity of an organism. What is the inclusion body? 4
b) Write down the important lesions of infectious canine hepatitis as found during necropsy. 3
12. a) List the viruses which have special affinity to the epithelial cells. Describe the microscopic lesions of FMD. 3
b) Differentiate between the diseases causing vesicular lesions. 4

Chittagong Veterinary and Animal Sciences University

DVM 3rd Year 2nd Semester Final Examination, 2009

Subject: Immunology and Serology (Theory)

Course Code: IMS-302

Full Marks-55, Time: 3 Hours

Figures in the right margin indicate full marks. Answer 3 (three) questions from each section of which Question No 1 is compulsory. Use separate answer script for each section.

Section-A

1. (a) Differentiate innate immunity from adaptive immunity. 4
(b) Name the cells and chemical mediators of innate and adaptive immunity. 6
2. (a) How cell mediated immunity differs from humoral immunity? 4
(b) Describe briefly the immune response of an exogenous antigen with a flow chart. 5
3. (a) Sketch the key roles of MHC molecules in presenting antigens. 3
(b) How microbes are recognized by innate immune response? 4
(c) Write about anamnestic response. 2
4. (a) Define the following terms: i) Autoimmune response; ii) Immune serum; iii) Dendritic cells; iv) Activated macrophage. 1x4=4
(b) Enumerate the different types of immunodiagnostic tests. 2
(c) Briefly describe the principle of indirect ELISA. 3

Section-B

5. (a) What are the basic requirements of immune system? 2
(b) Define hapten. What are the factors responsible for influencing the immunogenic activity of a foreign particle? 4
(c) Describe in detail the theories of antibody formation. 3
6. (a) Differentiate BCR from TCR. How do they differ from MHC class I and II molecules? 3
(b) What is superantigen? Draw and label the binding sites of superantigen with TH cell and antigen presenting cell surface receptors. 3
(c) What are the functions of hinge region of BCR? Describe the kind of immunoglobulins that are secreted during parasitic infestation. 3
7. (a) Differentiate helper subset from cytotoxic subset of T lymphocytes. 2
(b) How do you differentiate TH1 subset of cells from TH2? 2
(c) Differentiate B cells from T cells? 5
8. (a) Differentiate Freund's complete and incomplete adjuvant. 3
(b) Sketch the mechanisms involved in the pathogenesis of serum sickness. 3
(c) Mention the conditions required to be fulfilled for developing hemolytic diseases of newborns. 3

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination, 2009
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 3 (three) questions from each section of which question no 1 (one) and 5 (five) are compulsory. Use separate answer script for each section.

Section-A

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|----|---|----------|
| 1. | (a) Classify duck breeds according to purpose. | 4 |
| | (b) Write down the differences between common mallard duck and muscovy duck. | 6 |
| | (c) What is mule duck? How is it produced? Write down the advantages of mule duck production. | 5 |
| 2. | (a) Write down the varieties of pigeon available in Bangladesh. | 2 |
| | (b) "Pigeon farming for profitable squab production is feasible in Bangladesh"- Do you agree with this statement? Justify. | 8 |
| 3. | (a) Name three diseases each of duck and quail. How can you prevent and control these diseases from the managerial point of view? | 6 |
| | (b) How can you maintain operational bio-security in a quail farm? | 4 |
| 4. | Write short notes (any four) | 2.5x4=10 |
| | (a) Squab milk | |
| | (b) Duck Production in coastal area | |
| | (c) Breed and varieties of guinea fowl | |
| | (d) Sexing of duck | |
| | (e) Uniqueness in feeding goose | |

Section-B

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|----|--|----------|
| 5. | (a) State the prospects and problems of quail farming in Bangladesh | 6 |
| | (b) Write down peculiar characteristics of quail and guinea fowl. | 6 |
| | (c) Discuss the common behaviors of geese. | 3 |
| 6. | (a) Briefly describe the requirements for incubation of duck eggs. | 3 |
| | (b) Mention different systems of duck rearing with their merits and demerits. | 4 |
| | (c) Describe briefly about brooding of duckling. | 3 |
| 7. | (a) State the incubation period of eggs of duck, quail pigeon and turkey.. | 2 |
| | (b) What is rice-husk from incubation system? How does it differ from modern incubation system practised in the commercial hatchery? | 8 |
| 8. | Write short notes (any four) | 2.5x4=10 |
| | (a) Bio-security of duck farm | |
| | (b) Pair bond behavior of pigeon | |
| | (c) Run | |
| | (d) Guinea fowl as worst mother | |
| | (e) Dovecote | |