

Chittagong Veterinary and Animal Sciences University

DVM 3rd Year 2nd Semester Final Examination, 2010

Subject Title: General Medicine (Theory)

Course Code: GMD- 302

Full Marks - 70; Time: 3.0 Hours

(Figures in the right margin indicate full marks. Answer any **THREE** questions from each section of which question number **One** and **FIVE** are compulsory. Use separate answer scripts for each section.)

Section-A

1. a) What is hypothermia? How will you manage clinically a hypothermic kid? 3.0
b) Define allergy and anaphylaxis with an example in each. 2.0
c) How will you determine the level of dehydration in a calf? 3.0
d) Write down the different types of I/V fluids commonly practiced in animals with examples. 3.0
2. a) Enumerate infectious causes of stomatitis in cattle. 3.0
b) Briefly describe the principles of treatment of stomatitis. 4.0
c) Differentiate frothy bloat from free gas bloat. 2.0
d) Write down the line of treatment of frothy bloat in a bull. 3.0
3. a) Write down the etiology and clinical signs of cystitis in a doe. 3.0
b) Differentiate haemoglobinuria and myoglobinuria. 3.0
c) How urolithiasis can be prevented in goat? 3.0
d) Write down the basic difference in treating urinary tract infections between herbivores and carnivores. 3.0
4. a) Write down the common predisposing factors of respiratory diseases. 2.0
b) Define pneumonia. How can you differentiate different types of pneumonia by clinical signs? 3.0
c) Define pityriasis, hyperkeratosis and impetigo. Write down the causes, signs and treatment of urticaria in cattle. 4.0
d) Define photosensitization. Write down the common signs [&] of treatment of it. 3.0

Section-B

5. a) Define veterinary medicine. Give a brief history of it. 5.0
b) How can you clinically differentiate fever from heat stroke? Write down the line of treatment of heat stroke. 6.0
6. a) What are the causes of sudden death in a group of animals? 4.0
b) Write down the common stressors. How can you manage them? 4.0
c) Define unthriftiness and shock. What are the signs to diagnose shock in animals? 4.0
7. a) What are the causes of fluid loss in animals? 3.0
b) Write down the external causes of choke in animals. What are the common complications followed by choke? 4.0
c) A cow delivered recently is suffering from anorexia, colic and nervous disorders. There is a history of ingestion of placenta. What may be the presumptive diagnosis? How can you clinically manage the case? 5.0
8. Write down the line of treatment of the following conditions. Any four of them. 3x4= 12.0
a) Anemia in a buck b) Meningitis in a stallion Hypovolumic shock in a calf
d) Aspiration pneumonia in a bull e) Rickets in a foal

Chittagong Veterinary and Animal Sciences University

DVM 3rd Year 2nd Semester Final Examination, 2010

Subject Title: Pharmacology and Therapeutic (Theory)

Course Code: PHT- 302

Full Marks: 55; Time: 3.0 Hours



(Figures in the right margin indicate full marks. Answer any **THREE** questions from each section of which question number **One** is compulsory. Use separate answer scripts for each section.)

Section-A

1. a. Briefly explain "Chemotherapeutic triangle". 2
b. Classify antibiotics according to site of action and give 2 examples of each class. 4
c. Write down the mode of action of β -lactam antibiotics. List the indications of penicillin along with doses and adverse effects. 4
2. a. Write 3 important differential points between ampicillin and amoxicillin. 2
b. Write down broad uses and side effects of cephalosporin. 2
c. Why is tetracycline considered to be one of the broad spectrum antibiotics? What are the problems you could encounter from the use of antibiotic in animals during production period? 5
3. a. Which one is much safer antibiotic among aminoglycosides? Justify with the reasons. 4
b. Give 3 examples of macrolides and differentiate them from β -lactam antibiotics. 3
c. What are the adverse effects of macrolides? 2
4. a. Name four sulphonamides with their generic and trade names and doses. 3
b. Write down the toxicities and side effects of sulphonamides. 3
c. Write down the mode of action of sulphonamides in a sketch. 3

Section-B

5. a. Differentiate between quinolones and fluroquinolones. 2
b. Why do you think antimicrobials belonging to the fluroquinolones? 3
c. Write down the doses and mode of action of fluroquinolones. 4
6. a. Name six anthelmintics with generic and trade names and their recommended doses (2 for trematodes, 2 for cestodes and 2 for nematodes) 3
b. Write down the mode of action of albendazole, oxclozanide and niclosomide. 3
c. Write short notes on Praziquental. 3
7. a. What do you mean by coccidiostat? Give the mode of action and clinical use of sulphaquinoxalin and amprolium. 4
b. Name six antiprotozoal drugs with their trade names and doses. 3
c. Name common antifungal drugs used in veterinary practice. 2
8. a. Write down the uses and mode of action of oxytocin. 4
b. Enlist 5 antiviral drugs. 2
c. Write short notes on "Drug withdrawal period" 3

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination, 2010
Course Title: 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 where question No. 1 is **compulsory**. Use separate answer script for each section.)

Section-A

1. (a) What are the differences between monoclonal and polyclonal antibodies? 2
(b) Describe the principle of monoclonal antibody production. 6
(c) Mention the use of monoclonal antibody in medicine. 2
2. (a) Draw and label the structure of monomeric immunoglobulin. 4
(b) Briefly describe the morphologies and functions of different classes of immunoglobulin. 5
3. (a) What do you mean by antigen presentation? 3
(b) Describe the mechanism of endogenous antigen presentation. 6
4. (a) What do you mean by HA and HI? What kinds of diseases are diagnosed by HA and HI tests? 3
(b) Describe briefly the principles of HA and HI tests. 6

Section-B

5. (a) What do you mean by primary and secondary immune response? Describe them graphically. 3
(b) What are the basic requirements of immune system? 2
(c) What is hypersensitivity reaction? Classify hypersensitivity. Describe the pathogenic mechanism of Type 1 hypersensitivity reaction. 4
6. (a) What do you mean by class I and class II restrictions? 2
(b) What are the subpopulations of T-cells? How can you differentiate Th1 cells from Th2? 3
(c) What kinds of cells are killed by cytotoxic T-cells? Describe the mechanism of exogenous antigen presentation. 4
7. (a) What is serology? Classify serological tests. 4
(b) Name the major molecular techniques used for diagnoses of animal diseases. Define PCR and name different steps of PCR with a diagram. 3
(c) Write down the principle of direct FAT. 2
8. (a) What are the cells and molecules of innate immunity? Differentiate innate from adaptive immunity. 5
(b) What is autoimmunity? Name five autoimmune diseases. 4

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination, 2010

Subject: Protozoology (Theory)

Course Code: PRT-302

Full Marks: 70, Time: 3 Hours

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

Section-A

1. a) Define protozoa. Classify protozoa on the basis of their locomotion. 4
b) Mention the vehicles involved in the transmission of the following protozoa: 3
i. *Entamoeba histolytica* ii. *H. meleagridis* iii. *S. bovicanis*
iv. *T. cruzi* v. *H. T. foetus* vi. *T. evansi*
2. a) What is cyclical and non-cyclical transmission? Briefly describe the epidemiological factors responsible for transmission of trypanosomiasis. 4
b) "It is difficult to produce vaccine against trypanosomes"why? 3
3. a) Define excystation and encystation with example. What are the differences between cyst and trophozoites of *Balantidium coli*? 4
b) List five different waterborne zoonotic protozoa. What measures should be taken to control such infection in man and animals? 3
4. a) Define and draw the following:- 3
i. Trypomastigote ii. Promastigote iii. Schizont iv. Merozoite v. Gametocytes 4
b) How will you diagnose the following protozoan infections in the laboratory?
i. Babesiosis ii. Giardiasis iii. Chicken coccidiosis iv. Cryptosporidiosis
5. a) What is enzootic stability and instability? Outline the life cycle of *Babesia spp.* 4
b) How will you clinically differentiate babesiosis from anaplasmosis? 3
6. a) Sketch the life cycle of most pathogenic coccidian infecting poultry in Bangladesh. 4
b) Draw and label a typical sporulated oocyst of *Eimeria sp.* How will you differentiate oocysts of different coccidian? 3

Section-B

7. a) Describe the different developmental stages of *Trypanosoma sp.*? 3
b) List the mechanically transmitted trypanosomes with the arthropod vectors. 2
c) Write down the pathogenesis and control measures of "Surra". 2
8. a) Describe the life cycle of the causal agent responsible for "East coast fever" in cattle. 3
b) Describe the contrasts in between the life cycle of *Babesia spp* and *Theileria spp.* in vertebrate host? 3
c) How will you keep your dairy farm free from hemoprotozoan infection? 1
9. Differentiate between- 7
i. Anterior station development and Posterior station development of *Trypanosoma spp.*
ii. Transovarian and Trans-stadian development of *Babesia spp.* in tick.
iii. Holozoic and Saprozoic nutrition of protozoa.
iv. Development of *Plasmodium spp.* in mosquito and vertebrate hosts.
10. a) List the protozoa causing abortion in man and animals. 2
b) Describe the life cycle, epidemiology and control measures of a protozoan disease that causes early abortion in cow. 5
11. a) Classify different forms of leishmaniasis with their causal agents and reservoirs.. 4
b) "Inflammation at the biting site of a Sandfly increases the chance of Leishmaniasis"... Justify. 3
12. Write short notes on (any TWO)? 3.5x2= 7
d) Histomoniasis in Turkey
e) Coccidiosis in rabbit
f) Anaplasmosis in cattle

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination, 2010
Course Title: Poultry Nutrition (Theory)
Course Code: PNT -302
Full Marks: 55, Time: 3 Hours



(Figures in the right margin indicate full marks. Answer **THREE** questions from each section where question No. 5 is compulsory. Use separate answer script for each section.)

Section-A

1. (a) Name 3 energy source and 3 protein source feed ingredients that are conventionally used in poultry feed industry of Bangladesh, and also mention their energy and protein values. 3
(b) What do you mean by “non-essential”, “essential” and critical amino acids for poultry? When and how would supplement synthetic amino acids in your formulated poultry diet? 3
(c) What are the conventional and unconventional feed ingredients for poultry? Mention at least 5 feed ingredients from each group. 3
2. (a) Give the classification of vitamins with examples. 3
(b) Mention any three commonly occurred vitamin deficiency diseases, their symptoms and possible remedies. 3
(c) What is the significance of maintaining calcium-phosphorus ratio in the poultry diet? 3
3. (a) What do you mean by feed conversion ratio (FCR)? How do you calculate FCR for broiler and layer? 3
(b) What are the differences between broiler diet and layer diet? 3
(c) Why poultry could not digest fibrous feed as much as their mammalian counter part? Explain. 3
4. (a) What is “feed additives”? Why feed additives are used in poultry diet? 4
(b) Name 4(four) commonly used feed additives for poultry with their specific function. 5

Section-B

5. (a) Define ration. Write down the essential steps needed during ration formulation. 5
(b) Write down the nutrients requirements of broiler starter, grower and finisher ration. 5
6. (a) Classify mineral with their sources. Write down the functions and deficiency symptom of Ca, P, Mg, K, Fe, Mn, Se and Zn in poultry. 7
(b) Briefly discuss the nutritive value of fish meal. 2
7. (a) Define feeding. Give a list of feeding system for poultry. 4
(b) Which feeding system would you prefer and why? State the merits and demerits of mash and pellet feeding system. 5
8. Write short notes (any three) 3x3=9
i) Enzymatic digestion of poultry ii) Grit iii) Calorie-protein ratio iv) Feeding standard for poultry.

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination, 2010
Course Title: 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 **THREE** questions from each section where question No. 1 & 5 are compulsory. Use separate answer script for each section.)

Section-A

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|----|---|----------|
| 1. | (a) What are the varieties of Japanese Quail? | 2 |
| | (b) Mention the peculiar behavior of quail. | 3 |
| | (c) Describe the management procedure of quail rearing during breeding period. | 4 |
| | (d) Do you think quail farming is profitable in our country? Justify your options. | 6 |
| • | | |
| 2. | (a) What are the common procedures that have to be followed for clean- egg production and collection? | 5 |
| | (b) How will you select duck egg for hatching? | 5 |
| 3. | (a) Write down the importance of geese rearing with their peculiarities. | 5 |
| | (b) Describe the general characteristics of an Asiatic breed of goose. | 5 |
| 4. | Write short notes (any four) | 2.5x4=10 |
| | (a) Bio-security of quail farm; (b) Mule duck; (c) Sexing of duck; (d) Squab; and (e) Watch dog | |

Section-B

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|----|---|---|
| 5. | (a) What are the major problems that you have observed during the field trip in Sonagazi Duck Farm, Feni?--Explain briefly. What are your suggestions to overcome those problems? | 7 |
| | (b) How will you differentiate duck from drake? | 3 |
| | (c) Which system of duck rearing is most suitable and profitable in Bangladesh context? Why? | 5 |
| 6. | (a) "Guinea fowl farming is not feasible in Bangladesh"- do you agree with this statement? Justify your comments. | 6 |
| | (b) Write down the peculiar characteristics of pigeon rearing. | 4 |
| 7. | (a) Write down the quality of turkey meat. | 2 |
| | (b) What are the main constraints of turkey production in Bangladesh? What steps have to be taken to make it popularized? | 6 |
| | (c) Why artificial insemination is done for successful reproduction in turkey? | 2 |
| 8. | (a) What are the major problems of pigeon production in Bangladesh? | 3 |
| | (b) List the available breeds of pigeon for squab production in Bangladesh. | 2 |
| | (c) Narrate the feeding practices of pigeon. | 5 |

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination, 2010
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** questions from each section. Use separate answer script for each section)

Section-A

1. a) Briefly describe the pathogenesis and pathology of acute fascioliasis. 4
b) Write down the post-mortem findings in echinococcosis and verminous pneumonia. 3
2. a) Mention different types of host-viral infections with example. 2
b) Write down the post-mortem findings in PPR and infectious canine hepatitis. 5
3. a) What is inclusion body? Name five viral diseases showing intracytoplasmic inclusion body. 3
b) Write down the pathogenesis of "Bovine viral diarrhea" and mucosal disease complex. 4
4. a) Describe the pathogenesis and pathology of tuberculosis in cattle. 5
b) How does cattle TB differ from avian TB? 2
5. a) Enumerate diseases that cause abortion in cattle. 2
b) Write down the pathogenesis and pathology of brucellosis in cattle. 5
6. How would you diagnose the following diseases (any TWO)?
 - a) Anthrax
 - b) Leptospirosis
 - c) Haemorrhagic septicemia

Section-B

7. a) How would you differentiate the pathogenesis of the following condition? 4
 - i. Paralysis in tetanus and botulism
 - ii. Submandibular edema in haemonchosis and fasciolosis.
b) Mention the pathognomonic microscopic lesions found in "Mad cow disease" and Listeriosis. 3
8. a) Describe the pathology of "Hard pad disease" in young puppy. 4
b) What is ringworm? Why is it named so? 2
c) Mention some fungal diseases causing systemic mycoses and granulomatous lesions. 1
9. a) Write down the list of susceptible hosts and pathogenesis of rabies in canines. 5
b) How canine rabies differ from rabies in cattle. 2
10. a) Write down the pathogenesis and pathology of BQ in cattle. 5
b) List the bacterial diseases that cause sudden death in cattle? 2
11. a) Enumerate the diseases where stomatitis is a common clinical finding. 1
b) Discuss in detail the epidemiology, pathogenesis, pathology and diagnosis of Foot and Mouth Disease. 6
12. Write short notes on (any TWO)? 3.5x2= 7
 - a) Histoplasmosis
 - b) Marble lung disease
 - c) Red water fever