

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Pathology and Parasitology
MS in Parasitology
Final examination (January-June semester/ 2016)
Subject: Vector Biology and Tropical Disease
Subject code: VTD-601
Marks: 40 Time: 2 hours

Answer any four questions from the following:

1. a. Define Vector biology? What do you mean by Tropical Disease and Neglected Tropical disease? 5
- b. List some important tropical diseases with their vector and parasite 2
- c. Write down the significance of tropical disease research in veterinary science. 3

1. a. What is innate resistance of vector to parasite infection? Answer with example. 4
- b. Mention the chemical, physical and biological methods of controlling vectors. 4
- c. Enlist Tick borne and mosquito borne Zoonotic diseases. 2

2. a. How globalization, climate change and environmental changes influence the vectors And vector-borne diseases? 4
- b. What do you mean by integrated control of vector borne diseases? 3
- c. How Human behaviors influence the epidemiology of parasite zoonoses? 3

3. a. What is One Health concept and its relation to vector borne illness? 2
- b. Write short note on Vector Biology and Malaria Transmission in Southeast Asia. 6
- c. How you will take Control measures for Kalazar and Elephantiasis? 2

5. a. What is insecticide and insect repellent? How they work? 5
- b. How symbiotic microflora influence in vector biology ? 5

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Science
Department of Pathology and Parasitology
MS in Parasitology (January-June semester) Final Exam'2016
Course Title: Immunoparasitology
Course Code: IPR-601
Total Marks: 40

(Figures in the right margin indicate full marks)

Answer any 4 (four) questions

- 1 (a). What do you mean by exogenous and endogenous antigen? Give example. 5.0
(b). Explain how these antigens are processed and presented by body's immune system. 5.0
- 2(a). Define and classify immunity to parasite infection with example. 5.0
(b). Mention briefly how Leishmania evade host immune system. 5.0
- 3 (a). What are the features of development of immunity against Malaria? 5.0
(c). How Schistosomes generate immunopathogenesis? 5.0
- 4 (a). Define and classify hypersensitivity reaction with their synonames and mediator. 5.0
(b).What is Erythroblastosis fetalis ? Briefly describe the condition. 5.0
5. Write short notes on (any two) (5x2)
(i) Major Histocompatibility complex (ii) Lymphoid organs (iii) antiparasitic vaccine

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Science
Department of Pathology and Parasitology
MS in Parasitology (January-June semester) Final Exam'2016
Course Title: Avian parasitology
Course Code: APR-601
Total Marks: 40

(Figures in the right margin indicate full marks)

Answer any 4 (four) questions

- 1 (a). Name five important nematodes of poultry with their notable morphological features. 5.0
(b). Describe briefly the life cycle and control measures against the one of the most common and economic important nematode of poultry in Bangladesh perspectives. 5.0
- 2 (a). Name the avian Schistosomes and describe the condition 'Swimmer's itch'. 5.0
(b). Mention the clinical sign and pathogenesis of following parasites 5.0
i. *Prothogonimus ovatus* ii. *Capillaria annulata*
- 3 (a). How will you differentiate between *Raillietina* and *Davainea* species morphologically? 5.0
(b). Sketch the life cycle and mention the pathogenesis of *Davainea proglottina*. 5.0
4. (a). Enlist the important trematodes of duck with their host and predilection site. 5.0
(b) What are the important morphological features of *Echinostoma revolutum*. 5.0
5. Write down the scientific name, host and predilection site and major pathogenic effects of following parasites
i. Gape worm ii. Eye worm iii. Gizzard worm iv. Hair worm (2.5X4=10)

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
MS in Parasitology
January - June Semester Final examination-2016
Course title - General Parasitology
Course code – GPR - 601
Full Marks - 40, Time - 2 hours

Answer any **FOUR** questions in the following

1. a) Classify parasites on the basis of pathogenesis and zoonosis with example. 4.0
b) Describe the sources, routes and mode of transmission of parasitic infections in animals. 6.0
2. a) Mention some recent inventions related to Veterinary Parasitology 3.0
b) Differentiate Parasitism from Symbiosis. 3.0
c) Why it is difficult to produce vaccine production against parasites. 4.0
3. a) Define the following terms 1.0X4=4.0
i) Facultative and obligatory parasite ii) Transport and paratenic host iii) Pseudoparasites and Hyperparasites iv) Histozoic and Coelozoic parasite
b) Write short notes on 3X2=6.0
i) Hypobiosis ii) Drug resistance
4. a) Briefly describe the non-chemotherapeutic measures of parasite control in farm level. 5.0
b) Describe the investigation procedure for the identification of gastrointestinal Parasitic problems in a herd. 5.0
5. a) What kinds of measures should be taken to prevent anthelmintics resistance in animals 4.0
b) Briefly describe the morphology and general life cycle of Trematode. 6.0

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Pathology and Parasitology
MS in Parasitology

Final examination (January-June semester/ 2016)

Subject: Parasites of Zoo and Wild Animals

Subject code: ZWR-601

Marks: 40 Time: 2 hours

Answer any four questions from the following:

1. a. Enlist different ectoparasite and endoparasite in Deer and Monkey with their pathogenic significance. 5
b. List the parasites of Raptors reported in Asia. 3
c. How you will control parasitic infection in Zoo and safari park? 2
2. a. Enlist different ectoparasite and endoparasite in Ostrich, Turkey, peafowl and guinea fowl recorded in Bangladesh or Asia? 7
b. How you will control parasitic infection in wild mammals and birds? 3
3. a. Discuss the transmission, pathogenesis and pathology of cryptosporidiosis in non human primates. 7
b. List the hookworm in wild ruminant and write down their prevention measures. 3
4. a. Discuss the epidemiological factors associated with incidence of parasites in zoo animal and wild animals. 6
b. List some parasitic diseases that can transmit to visitors from zoo animals and zoo animals to visitors and veterinarian with their transmission pattern. 4
5. a. What are the common parasites of turtle, python and crocodile? How you will diagnose these parasites? 6
b. Write down the name of common parasites of Elephant? How you will give medicine to this animal? 4
6. a. Which diseases are transmitted by ectoparasites among zoo animals and wild birds? 4
b. Write short note (any one): i) Demodectic mange in monkey ii) Common G.I parasite found in Zebra. 6

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
M. S. in Surgery, Semester: January-June, 2016
Subject: Large Animal Anaesthesiology
Course Code: LAA 601; Credit: 2
Total Marks: 40
Time: 2 (Two) Hours

(Figures in the right margin indicate full marks. Answer any **FOUR** questions of the followings)

1. What are the preparations necessary before anaesthesia in case of large animals and why? 10.0
Mention the functions of different parts of inhalation anaesthetic machine.
2. Write down in brief with indications and techniques of the different nerve block and regional anaesthesia of a cow. 10.0
3. Write down the common local anaesthetics, sedatives and general anaesthetics used in large animals with their dose, onset of action, anaesthetic duration and their effects on different systems. 10.0
4. Write down the advantages and disadvantages of inhalation anaesthesia. Describe the different kinds of inhalation anaesthetics and breathing circuits. 10.0
5. a) Mention the possible postanaesthetic complications in large animals of general anaesthesia. Write down the prevention and treatment of such complications? Write down the ventilation techniques in large animals. 10.0
6. Write down in brief the anaesthetic procedure of following conditions- gid disease in a goat, umbilical hernia in a calf, penis amputation in a bull, enucleation of eyeball in a cow, dystocia in a goat, limb amputation in a calf, colic operation in a horse, udder amputation in a goat, rumenotomy in cow, dermoid cyst operation in calf. 10.0

M.S. in Surgery; January-June Semester-2016
Subject: Zoo, Wild and Lab. Animal Anaesthesia
Course code: ZWL 601

Total Marks: 40 **Time: 2 (two) hours**

Department of Medicine and Surgery
Faculty of Veterinary Medicine
CHITTAGONG VETERINARY AND ANIMAL SCIENCES UNIVERSITY

(Figures in the right margin indicate full marks. Answer any FOUR questions)

1. (a) Mention the classification of anaesthesia in animals. 03
(b) What should be monitored for respiratory and cardiovascular systems during general anaesthesia in animals? 04
(c) Briefly mention the maintenance of airway during anaesthesia for zoo, wild and laboratory animal practices? 03
2. (a) When is fluid therapy indicated in animals? 02
(b) What pre-existing disease processes or conditions typically associated with electrolyte abnormalities in zoo, wild and lab animals? 05
(c) What fluids should be administered to patients with sodium abnormalities and how fast can be administered in primates of wild animals? 03
3. (a) What are the principles of pain management in animals? 03
(b) Write down the capture and restraint techniques for different species of birds? 04
(c) Write down the objectives of CPR in wild animals. Mention about the six steps of CPR adapted from the human resuscitation council guidelines. 03
4. (a) Mention about the precapture considerations for wild and laboratory animals? 04
(b) Mention the types of dart used in zoo. 03
(c) Write down about the mechanism of drug delivery in blow darts? 03
5. (a) What are the equipment and methods used for restraint the venomous snake? 04
(b) Write about the venipuncture and intravenous catheterization for turtles? 03
(c) Mention the name and dosage of three recommended drugs for immobilization of monkey and gibbon in a zoo? 03
6. Write short notes on *any two* of the followings:- 2x5=10
 - a) Capture myopathy.
 - b) Anatomical and physiological considerations during Bird anaesthesia.
 - c) Premedicative agents for rodents.
 - d) Capture of displaced Sumatran Rhinoceroses.

Chittagong Veterinary and Animal Sciences University
Department of Medicine and Surgery
MS in Epidemiology
January-June Semester Final Examination 2016
Course title: Research Methodology
Course code: REM-601
Full marks: 40, Time: 2 hours

(Figures in the right margin indicate full marks. Answer any 5 questions from the following)

1. a. Enlist the 'measures of frequency' and 'measures of association' that can be estimated in different study designs. Explain why we cannot measure all different kinds of measures in all study designs. 6
- a. Write down 2 differences between descriptive study designs and analytical study designs. 2
2. a. Write down the differences between 'strata' and 'cluster'. 2
- b. Surgeons perform a new surgical procedure on 10 patients and report their outcomes. What kind of study is this? Justify your answer. 3
- c. What do you mean by 'loss to follow-up'? In which study design(s) we might encounter this problem? 3
3. a. List the characteristics of experimental study designs. 2
- b. Construct an experimental study design to measure the vaccine efficacy of a newly introduced vaccine against PPR in goats. 6
4. a. Suppose you have a study population of 4000 dairy cows and your estimated sample size is 250 cows. Describe the procedure of selecting the cows using systematic random sampling. 4
- b. What is sampling error? Describe with an example. 4
5. a. What are the basic differences between nested case-control study and case-cohort study design? 4
- b. In case-crossover study design, selection bias is minimized and time invariant host related confounder variables are controlled. Explain how? 4
6. a. Case-control study design is subjected to selection bias and recall bias. What measures you should take to minimize these biases? 4
- b. 'To study rare exposures, case-control study design is not suitable' – justify this statement. 2
- c. Explain 'blinding' in context of randomized controlled trial. 2

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
MS in Medicine
Semester: January-June 2016
Subject- Avian Medicine
Course code: AVM-601
Total marks – 40
Time – 2 (Two) hours

(Figures in the right margin indicate full marks. Answer any **FOUR** questions)

1. (a) What is biosecurity? Describe the factors influencing biosecurity in poultry farm. **08**
(b) Name six vertically transmitted diseases in poultry. **02**
2. Write down the etiology, clinical signs, postmortem lesions, treatment, prevention and control of Gumboro disease. **10**
3. (a) How can you differentiate between Marek's disease and Avian Leukosis. **05**
(b) Write short notes on Bumble foot disease and Pullorum disease. **05**
4. Write down the etiology, clinical signs, postmortem lesions, treatment, prevention and control of Duck plague. **10**
5. (a) Which subtypes of Avian influenza are highly pathogenic for chickens? **01**
(b) Write down the clinical signs, postmortem lesions, treatment, prevention and control of Avian influenza. **09**
6. Describe Coccidiosis and Brooder pneumonia in chickens. **10**

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
MS in Medicine
Semester: January-June 2016
Subject- Avian Medicine
Course code: AVM-601
Total marks – 40
Time – 2 (Two) hours

(Figures in the right margin indicate full marks. Answer any **FOUR** questions)

1. (a) What is biosecurity? Describe the factors influencing biosecurity in poultry farm. **08**
(b) Name six vertically transmitted diseases in poultry. **02**
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Chittagong Veterinary and Animal Sciences University

Faculty of Veterinary Medicine

Department of Medicine and Surgery

MS in Medicine

Semester: January – June 2016

Subject: Food Animal Medicine I

Course Code: FAM 601; Credit: 2

Total Marks: 40

Time: 2 (Two) Hours

(Figures in the right margin indicate full marks. Answer any **FOUR** questions)

1. a. Describe the etiology of bovine mastitis in details. **02**
b. Describe the strategies for therapy and prevention of mastitis. **05**
c. What are the economic significance of mastitis? **03**

2. Write down the cause, important clinical signs, pathognomonic post – mortem lesions, diagnosis, treatment, prevention and control of the following diseases: **05 X 2 = 10**
(i) Anthrax.
(ii) PPR.

3. a. What are the diseases that can be confused with brucellosis in pregnant cows? How would you differentiate them? **06**
b. A cow of 300 kg body weight is brought to the Large Animal Unit of SAQTVH, CVASU which is suffering from fever (106⁰F) and lameness. Clinical examination reveals the swelling of peripheral lymph nodes. What's your presumptive diagnosis? Write a prescription for the patient. **04**

4. a. Which helminthic disorder is the major cause of high mortality in buffalo calf? How would you treat and prevent the condition? **05**
b. Write down the clinical signs, diagnosis and treatment of nasal schistosomiasis in cows under field condition. **05**

5. a. Define wasting disease with example. Write down the important clinical signs and pathognomonic post – mortem lesions of tuberculosis (TB) and John's disease (Para TB) in cattle. How would you clinically manage them? **07**
b. Differentiate dermatophilosis from dermatophytosis. **03**

6. Write short notes on the following: **05 X 2 = 10**
(i) Colibacillosis in goat.
(ii) Rabies in cattle.

Chittagong Veterinary and Animal Sciences University
MS in Medicine Semester Final Examination- 2016
Course Title: Zoonotic Medicine (Theory)
Course Code: ZOM-601
Department of Medicine & Surgery
Time: 2 Hours; Full Marks: 40

Answers any eight (08) questions (5 marks in each question)

1. Focus on the disease burden of human rabies in association of dog bite in the Southeast Asia region.
2. What do you mean by “Mycobacterium tuberculosis complex”? “Tuberculosis is a most devastating infectious disease worldwide” to what extent you may agree or disagree.
3. Briefly discusses on the present status and control plan of tuberculosis in Bangladesh.
4. What is bioterrorism? Explain your opinion, whether you support bioterrorism or not. Point out the time events of anthrax used as bioterrorism.
5. Briefly discusses the ecological cycle of influenza A viruses. Why swine is called mixing vessel for influenza A virus?
6. Explain your views on zoonosis, and zoonotic diseases transmission.
7. Highlights the interim guidance: testing algorithm for pregnant women with history of travel to an area with Zika virus transmission, with/without clinical symptoms.
8. Briefly discuss the speculation of “zika virus infection and microcephaly in neonate”.
9. Focus on the chronology of outbreaks due to Nipah virus in Bangladesh. Briefly describe the interventions that could adopt to prevent Nipah virus infection in human.
10. Describe the natural reservoir and transmission of Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
MS in Medicine

Semester: January – June 2016

Subject: Production Diseases of Dairy Animals

Course Code: PDD 601; Credit: 2

Total Marks: 40

Time: 2 (Two) Hours

(Figures in the right margin indicate full marks. Answer any **FOUR** questions)

1. a. Define Production Diseases. How do you manage them? **04**
b. Define ketosis. Write down the etiology, clinical findings, diagnosis, treatment, prevention and control of ketosis in cattle. **06**

2. What is Pregnancy Toxemia in ewes? Write down the synonyms, etiology, clinical findings, lesions, diagnosis, treatment, prevention and control of Pregnancy Toxemia in ewes under field condition. **10**

3. Define Downer cow syndrome. Describe the etiology, clinical findings, lesions, treatment, prevention and control of Downer cow syndrome in relation to animal welfare considerations. **10**

4. Define Fatty Liver Disease in cattle. Write down the etiology, clinical findings, diagnosis, treatment, prevention and control of Fatty Liver Disease in cattle. **10**

5. a. What is gestation? Mention the common causes of termination of gestation in dairy cattle of Bangladesh perspective. **05**
b. Classify mastitis. Write down the line of treatment of acute mastitis of a cow which is brought to the Large Animal Unit of SAQTVH, CVASU. **05**

6. a. What is parturition? Describe the parturition of bovine along with function of relevant hormones. **05**
b. What are the reproductive hormones for dairy cattle? Write down their mode of action in details. **05**

– GOOD LUCK –

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery (DMS)
January-June Semester Final Examination 2016
Sub: Veterinary Dermatology; Course Code: VED-601
Full Marks: 40; Time 2 hours
Answer any four (4) from the following questions

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|---|---|---|---|
| 1 | a | What is Lumpy skin disease in cattle? Why it is so important? | 3 |
| | b | Discuss different aspects of lumpy skin disease | 7 |
| 2 | a | Enumerate congenital defects of skin | 3 |
| | b | Describe Etiology, pathogenesis, clinical findings and treatment of urticaria in horses | 4 |
| | c | What are the principles of treatment of skin diseases | 3 |
| 3 | a | Discuss about sex hormone imbalances | 6 |
| | b | Write down the clinical presentations and treatment of canine hyperadrenocorticism. | 4 |
| 4 | a | What is bacterial pyoderma and how does it develop in dogs? | 3 |
| | b | Classify bacterial pyoderma. Describe diagnosis and its management | 7 |
| 5 | a | Write down the management allergic skin diseases in dogs | 5 |
| | b | How will you treat defects in cornification of canine skin. | 5 |

Good Luck