Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
MS January-June Semester Final Examination 2015
MS in Pathology
Course title: Reproductive Pathology
Course code: RPT-601
Full marks: 40, Time: 2 hours

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

1. a. Write down the consequences of overiectomy in sexually mature and sexually immature females. 2
   b. Briefly describe different types of ovarian neoplasia. 2
   c. Enlist the cysts encountered in ovary. Describe 2 most common cysts found in cows. 4

2. a. Write down the etiology of uterine prolapsed and torsion. 3
   b. What are the non-specific and specific causes of uterine infection? 3
   c. Write a short note on transmissible venereal tumor. 2

3. a. What is early embryonic death and retention of placenta? 2
   b. Write down the pathogenesis of pyometra in cows and in bitches. 6

4. a. Describe some developmental anomalies of penis and prepuce. 3
   b. Define the terms: posthitis, spermatocele, spermatidic giant cell 3
   c. What are the anatomical causes of crytorchidism? 2

5. a. Write down the etiology and pathogenesis of brucella abortion. 6
   b. list the gross lesions observed in listerial abortion. 2

6. a. How Tritrichomonas foetus enters in to females? 2
   b. Briefly describe the pathogenesis of changes created by this protozoon. 6

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
MS January-June Semester Final Examination 2015
MS in Pathology
Course title: Pathology of Metabolic Diseases
Course code: MPT-601
Full marks: 40, Time: 2 hours

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

1. a. Define metabolic disease. Enlist the characteristics of metabolic diseases? 3
   b. Briefly describe the production of ketone bodies in post parturient cows. 5

2. a. Name 2 metabolic diseases where gross muscular changes are observed. Describe the gross changes of those diseases. 5
   b. Write down the pathogenesis of hypomagnesaemia. 3

3. a. Write a short note on pregnancy toxemia in ewes. 4
   b. Sketch the pathogenesis of post parturient hemoglobinuria. 4

4. a. Write down the etiology of white muscle disease along with its pathogenesis? 5
   b. Describe the microscopic changes of azoturia. 3

5. a. Write down the etiology and pathogenesis of milk fever. 8

6. a. How myoglobinuric nephrosis is formed in azoturia? 6
   b. What is grass tetany, winter tetany and milk tetany? 2

Chittagong Veterinary and Animal Sciences University

Faculty of Veterinary Medicine

MS in Pathology

January-June Semester Final Examination 2015

Course title: Pathology of Bacterial and Viral diseases

Course code: BVD-601

Full marks: 40, Time: 2 hours

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

1. a. Write in brief about the infectious process of an organism. 3
   b. Write down the general features of immunity to pathogens. 2
   c. Write with diagram the effector mechanisms of immunity against extracellular bacteria. 3

2. a. Write in brief about "Lamb dysentery" 2
   b. Write down the transmission, pathogenesis, gross lesions, microscopic lesions and diagnosis of anthrax in horse. 6

3. a. Write down the process of granuloma formation. How the lesions of tuberculosis differ from paratuberculosis? 4
   b. Write down the etiology, transmission, pathogenesis and pathology of "Lumpy Jaw" in cattle. 4

4. a. Write in brief about immune response to viruses and mechanism of virus induced tissue damage. 4
   b. Write down the transmission, pathogenesis, pathology of infectious bovine rhinotracheitis. 4

5. a. Write down the pathological lesions produced in case of pox and papillomatosis. 5
   b. Write down the transmission and pathology of scrapie in sheep. 3

6. a. Write down the transmission, pathogenesis, pathology and complication of "Foot and Mouth Disease" in cattle. 5
   b. Write in brief about the pathogenesis of rabies. 3

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
M. S. in Pathology
Jan- June Semester Final Exam. 2015
Sub: Pathology of Parasitic Diseases (Theory)
Course code- PPT-602
Total Marks- 40, Time- 2 hours

Figures in the right margin indicate full marks. Answer any FIVE of the following questions.

1. (a) Describe the pathogenesis and pathology of babesiosis. 6.0
   (b) How would you differentiate babesiosis from anaplasmosis? 2.0

2. (a) Write down the pathogenesis and pathology of produced by *Haemonchus contortus* in cattle. 5.0
   (b) Describe the pathogenic significance of heart worm infection in dog. 3.0

3. List the parasites which may cause jaundice in animals. Describe the pathogenesis and pathology produced by *Fasciola gigantica* in cattle. 8.0

4. Write down the pathogenic significance of any two of the following conditions: 4x2=8.0
   (i) *Strongylus vulgaris* infection in horse.
   (ii) Ascariasis in buffalo calf.
   (iii) Verminous pneumonia.

5. (a) Why the adult cestodes are found in the upper part of intestine and which stage of cestodes are more harmful? Write down the pathologic significance of echinococcosis. 5.0
   (b) Write down the pathogenesis of oesophagostomiasis in cattle. 3.0

6. (a) Name four important ticks of cattle and mention the economic importance of tick and tick-borne diseases. 4.0
   (a) Write down the microscopic lesions of the followings: (any two) 2x2= 4.0
   (i) Canine demodecosis
   (ii) *Spirocerca lupi* infection in dog.
   (iii) Hump sore in cattle.

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Science
Department of Pathology and Parasitology
MS in Parasitology (January-June semester) Final Exam'2015
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) Represent the predilection site of important helminth parasites of poultry with a diagram. 6.0

(b) Mention the factors responsible for the occurrence and distribution of parasite in a geographical area. 4.0

2. State the notable morphological features of following parasites (2.0 x 5= 10)

i. *Syngamus trachea* ii. *Tetramere americana*
iii. *Gongylonema ingluvicola* iv. *Echinuria uncinata* v. *Heterakis gallinarum*

3 (a). Enlist the important trematode species of duck with their location and geographical distribution. 4.0

(b). Briefly describe the life cycle and pathogenesis of the most pathogenic trematode of poultry. 6.0

4. Mention the pathogenesis, clinical sign and diagnosis of following parasitic infection (2.5 x 4= 10)

i. *Capillaria annulata* ii. *Davainea proglottina*
iii. *Cheilospirua hamulosa* iv. *Ascaridia galli*

5. (a)What measures will you take to control helminth infection in a poultry farm? 6.0

(b). Is it possible to eradicate parasitic infection from an infected farm? Justify your answer. 4.0

Chittagong Veterinary and Animal Sciences University

Department of Pathology and Parasitology

Final Examination of Masters of Science in Parasitology

Course title: Vector biology and tropical diseases (Theory)

Course code: VTD-601

Semester: January-June '2015

Time : 2 hours Marks : 40

Answer any **FOUR** questions from the following: 4x10=40

1. a. What is vector and vector biology? List different types of vectors with examples.
   b. Why tropical disease is important to study? List some common tropical diseases.
2. a. Give an example of innate resistance of parasite. How they can be linked with parasite vaccine development?
   b. List Mention general contro; measures of insect vectors of economic importance.
3. a. What is One Health agenda? How human behavior influences the epidemiology of parasitic zoonoses?
   b. How One health movement is related to vector borne illness and their prevention?
4. a. Write short note on Integrated vector management.
   b. Mention the non-chemical control means of different vectors?
5. a. What is insecticide and insect repellent? Give example with their mode of action.
   b. How can symbiotic microflora influence vector biology?
6. Write short notes on (any two):-
   a. Vector competency
   b. Insecticide assay
   c. Tick borne zoonoses

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Science
Department of Pathology and Parasitology
MS in Parasitology (January-June semester) Final Exam'2015
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 immunity to parasite? How will you measure it? 4.0
(b). Explain the mechanism of generation of immunity against a parasitic infection. 6.0

2 . Mention the pathways how parasite evade host immune system with example in each case. 6.0
(b). What do you mean by immunopathogenesis? Is this phenomenon always harmful for the host? 4.0

3 (a). What is hypersensitivity reaction? How will you distinguish between different hypersensitivity reactions? 4.0

(b). Explain briefly why generation of protective immunity is difficult against Trypanosoma infection. 6.0

4 (a). How body's immune system response against Schistosome infection ? 4.0
(b). Describe the factors associated with the development of resistance and immunity to malarial infection. 6.0

5. Write short notes on (2.5x4) 10
(i) Pipe-stem fibrosis (ii) Antigen presenting cells (iii) Antigen-antibody reaction (iv) Humoral vs cell mediated immunity.

Chittagong Veterinary and Animal Sciences University

Department of Pathology and Parasitology

Final Examination of Masters of Science in Parasitology

Course title: Parasites of Zoo and Wild Animals (Theory)

Course code: ZWR-601

Semester: January-June '2015

Marks : 40

Time : 2 hours

Answer any **FOUR** questions from the following: 4x10=40

1. a. List different endoparasites of wild mammals recorded in Bangladesh.
   b. How will you control endoparasites in animals of a Safari park?
2. a. List the parasites of wild birds recorded in Bangladesh.
   b. Which one is the most pathogenic poultry cestode? Discuss the pathology and pathogenesis.
3. a. "Ectoparasites are responsible for transmission of diseases among wild animals"- explain.
   b. Mention the general control measures of parasitic infections in a Zoo or Safari?
4. a. Write short note on "Zoonoses and Wild life".
   b. Discuss different epidemiological factors associated with incidence of parasites in wild animals and birds.
5. a. Define Mange. How will you diagnose and treat mange in wild animals?
   b. List the hookworms usually found in wild ruminants and their prevention options?
6. Write short notes on (any two):-
   a. Fasciolosis in Deer
   b. Demodectic mange in monkey
   c. Dibothriocephalus latus infection in dog

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
MS in Parasitology
January - June Semester Final examination-2015
Course title - General Parasitology
Course code – GPR - 601
Full Marks - 40, Time - 2 hours

Answer any **Five (5)** questions in the following

1. a) Briefly describe the factors that affects the densities and distribution of parasites. 4.0
   b) Describe the factors associated with transmission of parasitic infections in animals 4.0

2. a) Define the following terms-5 (any five) 1.0X5=5.0
   i) Facultative and obligatory parasite ii) Carrier and Reservoir host iii) Stenoxenous parasites iv) Transport and Paratenic host iii) Hyperparasites iv) Proliferous parasites v) Histozoic and Coelozoic parasite vi) Biotic potential
   b) What is symbiosis? Differentiate between parasitism and commensalisms. 3.0

3. a) Briefly describe the injurious effects of parasites on host. 4.0
   b) Write down the zoological nomenclature of parasites. 4.0

4. a) Briefly describe the non-chemotherapeutic measures of parasite control in farm level. 4.0
   b) Describe the investigation procedure for the identification of gastrointestinal parasitic problems in a herd. 4.0

5. a) What kinds of measures should be taken to prevent anthelmintics resistance in animals. 4.0
   b) Why it is difficult to produce vaccine production against parasites. 4.0

6. Write short notes on any two (2) 4.0X2=8.0
   a) Hypobiosis and Spring rise
   b) Selfcure phenomenon and Drug resistance
   c) Vector and Intermediate host

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
MS in Parasitology
January - June Semester Final Examination-2015
Course title - Helminthology
Course code – HPR - 601
Full Marks - 40, Time - 2 hours

Answer any **Five (5)** questions in the following

1. a) Define Helminthes and differentiate bursate from non-bursate nematodes. 3.0
   b) Briefly describe the general pattern of the life cycle of nematode parasites. 5.0

2. Describe the laboratory diagnostic procedures of the following diseases (Any four) 2.0X4=8.0
   a) Fasciolosis
   b) Monieziosis
   c) Trichinellosis
   d) Verminous Pneumonia
   e) Strongylus vulgarus infection in horse

3. a) Briefly describe the larval features of *Haemonchus controus* in goat. 3.0
   b) Write short notes on (any two) 2.5X2=5.0
   i) Swimmer itch ii) *Dirofilaria immitis* infection in dog iii) *Spirocerca lupi*

4. a) Listed the importance GI nematodes of dairy cow. 2.0
   b) As a field veterinarian, what would be your suggestion to control the parasitic infection in national level. 4.0

5. a) Enlisted the important species of trematodes of dog and cat. 3.0
   b) Mention the morphology of schistosomatidae and paramphistomatidae family and mention its genera with species. 5.0

6. a) How will you differentiate cyclophyllidea and pseudophylidea? 3.0
   b) Briefly describe the morphology, life cycle and control measures of *Toxocara canis*. 5.0

MS in Medicine

Dept of Medicine and Surgery, CVASU

Semester Final Examination: January-June/2015

Sub: Food Animal Medicine (FAM-601)

Full Marks: 40 Time: 2 Hours

Figures in the right margin indicate full marks. Answer any four questions. 4 x 10=40

1. a) Write down the name of diseases of ruminant caused by clostridial bacteria.
   b) Briefly describe the common clinical findings produced by blackleg and anthrax. Provide the line of treatment.

2. a) Write down the name of 5(five) bacterial diseases that produced endo-toxin, causing toxemia in food animals.
   b) Write down the clinical findings and line of treatment of H.S in Buffalo in costal areas of Chittagong.

3. a) Write down the name of common viral diseases of animal that affect the skin.
   b) Briefly describe the clinical findings of F.M.D, ephemeral fever of cattle. Provide the line of treatment.

4. a) Mention the name of rickettsial diseases of bovine with etiology.
   b) Briefly describe the clinical findings, diagnosis and treatment of piroplasmosis of cattle.

5. a) Define encephalitis. Mention the name of three diseases with etiology that causes encephalitis.
   b) Briefly describe the clinical findings, diagnosis and treatment of Listeriosis of sheep.

6. Write down the prescription of the following:
   a) Bovine schistosomiasis
   b) Papillomatosis
   c) Viral diarrhoea
   d) Tetanus
   e) Leptospirosis