

Chattogram Veterinary and Animal Sciences University
Department of Pathology and Parasitology
M. S. in Pathology
Jan- June Semester Final Exam. 2024
Sub: Pathology of Parasitic Diseases (Theory)
Course code- PPT-601
Total Marks- 40, Time- 2 hours

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

1. (a) Mention the common pathologic effects produced by parasites on host. 4.0
(b) Write short note on tick paralysis. 4.0
2. (a) Describe the pathogenesis and pathology of fascioliasis in cattle. 6.0
(b) Mention the pathogenic significance of heart worm infection in dog. 2.0
3. (a) Describe the pathogenesis and pathology strongylosis in horse. 5.0
(b) Write down the pathologic significance of ascaiiasis in calf. 3.0
4. (a) Define and classify myiasis. 4.0
(b) Write down the pathogenesis and pathology of nodule worm disease of cattle. 4.0
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 pathology of verminous pneumonia in calf. 3.0
6. (a) How you will differentiate the pathogenesis of anaplasmosis from that babesiasis? How can you diagnose the haemoparasitic diseases? 5.0
(b) What do you mean by mange and scabies? Write a short note on canine demodicosis. 3.0

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
MS in Pathology
January-June Semester Final Examination 2024
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) Summarize Koch's postulates of bacterial infections with some exceptions. 2.0
b) Write in brief the bacterial virulence factors. 2.0
c) Discuss how intracellular and extracellular bacteria establish itself into the host through evasion mechanism. 4.0
2. a) What are the postmortem findings of anthrax in cattle? 2.0
b) How will you diagnose tuberculosis in cattle? 1.0
b) Write down the transmission, pathogenesis, gross lesions, microscopic lesions and diagnosis of black quarter in cattle. 5.0
3. a) A cow is showing dark-red and foamy urine with anemia and leukocytosis. Write down the name, pathogenesis and differential diagnosis of this disease. 4.0
b) Write down toxins and pathologic effects produced by *Clostridium perfringens*. 2.0
c) How type D enterotoxemia is developed in sheep? 2.0
4. a) A goat is showing nervous signs with a history of dog bite. Write down the name, pathogenesis and differential diagnosis of the disease. 4.0
b) Write in brief the pathogenesis, pathology of a disease of dog suffering from hyperkeratosis in the foot pad. 4.0
5. a) Write down the modern classification of viruses with examples. 2.0
b) How cell injury is caused by virus? 2.0
c) Write down the pathogenesis and pathology of bovine viral diarrhoea and mucosal disease. 4.0
6. a) Write down the pathogenesis, pathology and differential diagnosis of FMD in cattle. 4.0
b) Write short notes on following diseases 2.0×2=
4.0
i) Bovine spongiform encephalopathy, ii) Strangle in horse

Chattogram Veterinary and Animal Sciences University

Department of Pathology and Parasitology

MS in Parasitology (Final Examination)

Course title: Vector Biology and Tropical Diseases (Theory)

Course code: VDT-601

Semester: January-June, 2024

Time: 2 hours

Marks: 40

Answer any **FOUR** question from the following:

4 X 10 = 40

(All questions have equal marks)

1. a. List different tropical diseases reported in Bangladesh. Write down the scopes of tropical disease research in Veterinary Science.
b. Define vector with its classification. Illustrate types of biological vectors with appropriate example.
2. a. List the zoonotic diseases for which arthropods act as vectors in Bangladesh perspective. Discuss vector competency, seasonal activity and population dynamics of tick.
b. How does an unfed tick maintain water balance in its body.
3. a. How globalization, climate change and environmental changes influence the vectors and vector-borne diseases?
b. What is one health? How one health movement is related to vector borne illness and their prevention?
4. a. Describe the vector importance of
 - i. Sand flies
 - ii. House flies
 - iii. Horse flies
 - iv. Dog flea
 - iv. Castor bean tick
b. What is insecticide and insect repellent? How they work?
5. Write short note on (any two)
 - a. Bionomics of Tsetse flies
 - b. Vector potential of Tabanid flies
 - c. Vector biology and Malaria transmission in southeast Asia

Chattogram Veterinary and Animal Sciences University
Department of Pathology and Parasitology
Final Examination of Masters of Science in Parasitology
Course Title: Helminthology
Course Code: HPR-601
Semester: January- June' 2024

Time: 2 hours

Total marks: 40

Answer any **FOUR (4)** questions from the following. Figures in the right margin indicate the full marks.

1. a). List the parasites that cause 'Verminous Pneumonia' in animals? Sketch the pathogenies of 'Dictyocaulosis' in cattle. 5
b). Differentiate the life cycle differences among *Dictyocaulus*, *Metastrongylus* and *Oslerus* spp in animals. 5
2. a). Sketch the life cycle of '*Spirocerca lupi*' in dogs. 5
b). Briefly discuss the pathogenesis of 'Haemonchosis' in sheep. 5
3. a). Write down the morphological features of *Haemonchus*, *Strongylus*, *Habronema* *Trichiuris* and *Ancylostoma* species. 5
b). Sketch the pathogenesis of 'Gastric and Cutaneous Habronemiasis' in horse. 5
4. a). List 5 (five) major helminths of cattle, goat and horse with their location in final hosts. 5
b). Write down the risk factor and pathogenic significance of 'Pork tapeworm' infection in man and animal. 5
5. a). List 5 (five) important helminths of domestic chicken. Sketch the life cycle of 'Gapeworm infection' in a game bird. 5
b). How will you confirm the 'Canine heartworm' and 'Caine whipworm infection' in a clinical parasitology laboratory. 5
6. a). Explain the terms 'self-cure phenomenon' and 'arrested larval development'. 5
b). What measures will you take to control and prevent helminths infections/infestations in a dairy herd. 5

Chattogram Veterinary and Animal Sciences University
Department of Pathology and Parasitology
January - June Semester Final Examination - 2024
MS in Parasitology
Course title - Parasites of Zoo and Wild Animals
Course code : ZWA - 601
Full Marks - 40, Time - 2 hours

Time: 2 hours

Total marks: 40

Answer any **FOUR (4)** questions from the following. Figures in the right margin indicate the full marks.

1. a). Define Parasitology and explain its scope in wildlife health and wellbeing. 4
b). Enlisted different ectoparasites and endoparasites in Deer and Monkey with their pathogenic significance. 3
c). How you will control parasitic infection in Zoo and Safari Park? 3
2. a). Discuss the epidemiological factors associated with incidence of parasites in zoo animal and wild animals. 5
b). Illustrate the life cycle and pathogenic effect of fasciolosis in Elephant with their prevention measures in a National Zoo. 5
3. a). List the parasites Raptors with their predilection sites reported in Asia. 4
b). Write down the standard procedures of collection, preservation and shipment of different biological samples for parasitological examination from a zoo to a diagnostic clinic. 6
4. a). What are the common parasites of turtle, python and crocodile? How you will be diagnosed these parasites? 5
b). Define zoonosis. List the zoonotic parasites of monkey. Do you think vaccination is possible to prevent the zoo animal nematode infection? -Justify 5
5. a). List some parasitic diseases that can transmit to visitors from zoo animals and zoo animals to visitors and veterinarian with their transmission pattern. 4
b). Write short notes on (any two) 3X2=6
 - i) Mange in Tiger
 - ii) Common G. I. parasites found in Zebra
 - iii) Verminous pneumonia in donkey
 - iv) Helminthiasis in mammals

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
Semester Final Examination of Masters of Science in Parasitology
Course title: Immuno-parasitology (Theory)
Course code: IPR-602
Semester: January-June, 2024

Time : 2 hours

Marks : 40

Answer any **FOUR** questions from the following:
(All questions bear equal marks)

4x10=40

1. a. Mention the scopes of immune-parasitology? Define antigen and its types.
b. Define and classify hypersensitivity reactions. Write down the mechanism of type-4 hypersensitivity.
2. a. What is immune evasion? Illustrate the mentioned mechanism in case of *Plasmodium* and *Trypanosoma* spp. infections.
b. What is MHC molecule? Illustrate the processing and presentation of an endogenous antigen by an antigen presenting cell.
3. a. Define immunoglobulin? Distinguish IgG from IgM.
b. What is CD molecule? Classify major cells of immune system based on CD molecules?
4. a. Describe relationship between host immunity and population dynamics of gastro intestinal parasites.
b. Write down the properties of an ideal anthelmintics. Discuss the mechanism of developing anthelmintics resistance.
5. a. Describe the difficulties of vaccine production against helminths.
b. What are the cells of immune system? Describe the mechanism of immune evasion by adult worms.
6. Write short notes on (any two):-
 - a. Major histocompatibility complex
 - b. Lung worm vaccine in cattle
 - c. Vaccine for anaplasmosis

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Chattogram Veterinary and Animal Sciences University
Department of Pathology and Parasitology
Final Examination of Masters of Science in Parasitology
Course Title: Avian Parasitology
Course Code: APR-601
Semester: January- June' 2024

Time: 2 hours

Total marks: 40

Answer any **FOUR (4)** questions from the following. Figures in the right margin indicate the full marks.

1. a). Describe the life cycle of a common helminth parasite in birds. How does this life cycle facilitate transmission and survival? 5
b). List the important nematodes of chicken, duck and pigeon with their intermediate host and location. 5
2. a). Explain the significance of *Plasmodium* species in birds. How do these protozoan parasites affect avian health, and what are the vectors involved in their transmission? 5
b). Discuss the methods used to identify and study protozoan parasites in avian populations. 5
3. a). Identify avian parasites that pose a zoonotic risk to humans. What are the transmission pathways and public health implications? 4
b). Discuss the challenges and strategies involved in treating parasitic infections in wild bird populations versus domesticated birds. 6
4. a). Enlist the poultry cestode and their morphological features. 4
b). Describe the economic importance, epidemiological features and control measures against *Ascaridia galli* infection in chicken. 6
5. Write short note on **any two** of the following. 5×2=10
 - a) Oviduct fluke
 - b) Red mite
 - c) Coccidiosis in poultry