

**Chittagong Veterinary and Animal Sciences University**  
**Department of Pathology and Parasitology**  
**MS in Pathology**  
**January-June Semester Final Examination 2021**  
**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  
b) Write down the general features of immunity to pathogens. 2  
c) Write with diagram the innate and acquired immunity against intracellular bacteria. 4
2. a) What are the postmortem findings of anthrax in cattle. 2  
b) How will you diagnose tuberculosis? 1  
b) Write down the transmission, pathogenesis, gross lesions, microscopic lesions and diagnosis of black quarter in cattle. 5
3. a) Write down the pathogenesis of different forms of enteric colibacillosis. 2  
b) Write down the pathology of glanders in horse. 2  
b) Write down the pathogenesis and pathology of brucellosis in cattle. 4
4. a) Briefly describe the pathogenesis of rabies in animals. 3  
b) Write in brief the pathogenesis, pathology of canine distemper. 5
5. a) How does immunosuppression occur in rinderpest? Write down its pathology. 2.0  
b) Describe briefly the pathogenesis of following diseases: 3X2=6  
i) Bovine viral diarrhoea and mucosal diseases, ii) Parvovirus infection in dog
6. a) Write down the pathogenesis of Foot and Mouth Disease. 2  
b) Write short notes on (any two): 3X2=6  
i) Scrapie, ii) Papillomatosis, iii) Vesicular exanthema

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**MS in Pathology**  
**January-June Semester Final Examination 2021**  
**Course Title: Pathology of Parasitic Diseases, Course Code: PPT-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) Define immune response. Why immune response against helminthic infection is challenging? 0.5+1.5
- b) Describe innate and acquired defenses of host against protozoan infections. 6.0
2. a) How ascariasis occurs in young animals? 2.0
- b) Illustrate the pathological conditions and their consequences those are occurred due to fascioliasis. 6.0
3. a) Enumerate the pathological effects of helminthic parasites upon the host. 2.0
- b) Write down the pathogenesis, pathology and clinical significance of oesophagostomiasis. 6.0
4. a) Define and classify myiasis with examples. 3.0
- b) Write in brief the pathogenesis, pathology and diagnosis of cutaneous acariasis. 5.0
5. a) Enlist five species of hemo-protozoa of different genera. How will you diagnose them in laboratory? What will be your control strategy? 0.5+2.0  
    +1.5
- b) Describe briefly the pathogenesis, pathology and clinical significance of babesiosis in animals. 4.0
6. a) Define coccidiosis. Enlist five species of *Eimeria* and their locations in cattle. 1.0+2.0
- b) Write down the clinical signs, pathogenesis, pathology and diagnosis of coccidiosis. 5.0

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**MS January-June Semester Final Examination 2021**  
**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. Differentiate metabolic diseases from nutritional deficiency diseases? 3  
b. Write down the etiology and pathogenesis of hypomagnesaemia. 5
2. a. Why horses are prone to azoturia than cattle? 2  
b. Describe the events responsible for death from azoturia in horses. 6
3. What happens when a cow is suffered with calcium deficiency at post parturient period? 8
4. a. Write down the etiology of post parturient hemoglobinuria along with its pathogenesis? 5  
b. Enlist the changes occur in muscles in vitamin E and selenium deficiency. 3
5. Write down the consequences of impaired CHO and volatile fatty acid metabolism in cows. 8
6. a. What do you understand by 'fat ewe syndrome'? 4  
b. Describe the pathology of azoturia. 4