

# Chattogram Veterinary and Animal Sciences University

DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021

Course Title: Avian Medicine (Theory)

Course Code: AVM – 401 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **THREE (3)** questions from each section, where Question no. 1 is compulsory.. Use separate answer script for each section. Fractions of the questions must be answered together)

## SECTION-A

1. a) Give a vaccination schedule for broiler, sonali and commercial layer chicken in a tabular form. 4.0  
b) Enlist the immunosuppressive diseases of poultry. 1.0
2. a) Write down the cause, epidemiology, clinical signs and post-mortem findings of Avian influenza. 4.0  
b) How will you differentiate Avian influenza from the Newcastle disease? 2.0
3. a) Write down the causes, clinical findings and diagnostic procedures of chicken coccidiosis. 4.0  
b) Which nematodal parasite is very common in sonali and commercial layer chicken in Bangladesh? How will you treat this condition? (1.0+1.0) = 2.0
4. a) Write down the cause, epidemiology, clinical signs and post-mortem findings of Brooder pneumonia in poultry. Why advice is very important in case of Brooder pneumonia? (2.5+0.5)=3.0  
b) Give a prescription for a broiler flock affected with Brooder pneumonia. 2.0  
c) Write down the pathognomonic lesions of Black head disease in turkey 1.0

## SECTION-B

5. a) Write down the etiology with strain classification, transmission, pathognomonic clinical signs, postmortem lesions, and treatment of Chlamydia infection in parrot with public health significance. 4.0  
b) A duck owner come to you with 02 (Two) live sick ducks of 12 weeks of age, showing flaccid paralysis of legs, wings and neck. The ducks having the history of the eating snail from a pond and then some died without any clinical signs. What is your presumptive diagnosis? How will you treat and control this condition? (1.0+1.0)= 2.0
6. a) Enlist some bacterial diseases of poultry where valvular/vegetative endocarditis is pronounced? 1.5  
b) Which bacterial disease is usually transmitted in commercial layer flocks by rats? 0.5  
c) A layer farmer came to you with sick chickens of 16 weeks of age. On the history, the affected chickens were showing shrunken and pale combs and wattles, mucoid yellowish diarrhoea adhered to the vent region with rapid spreading high morbidity and mortality. On postmortem examination, a distinct copperbronze sheen found on swollen friable liver; also cardiomegaly with fibrinous pericarditis, splenomegaly and typhilitis were also found. What is your presumptive diagnosis? Write a prescription for this flock. (1.0 +3.0)= 4.0
7. a) A pigeon owner came to you with a live pigeon. On thorough examination, you found that the oral cavity contained greenishyellow fluids which were dripped from the beaks. What is your presumptive diagnosis? How will you treat the condition (0.5+1.5)=2.0  
b) Which nematode of both sexes having always in permanent copulation position in chicken? Describe its synonyms, predilection site, mode of life cycle with prepatent period, clinical signs, postmortem lesions, treatment, prevention and control in the affected and nonaffected chickens. (0.5+3.5)=4.0
8. a) Write down the pathognomonic clinical signs and postmortem lesions of different forms of Newcastle disease in the avian species. 4.0  
b) Give a prescription for a turkey flock affected with Mycoplasmosis. 2.0

**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Anesthesiology and Operative Surgery (Theory)**

**Course Code: AOS-401 (T)**

**Full Marks: 70, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. **1** and **5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1. a) What do you mean by general anaesthesia? What are the key organ systems to focus on during physical examination that are relevant to anaesthetic planning? 3
- b) Ruminants are not good subjects for general anaesthesia - Explain why? 3
- c) Define narcotic, pre-emptive analgesic, CRI, amnesia and balanced anaesthesia. 5
2. a) What is the purpose of pre-anaesthetic sedation? Why would I choose alpha-2 agonist for pre-anaesthetic medication? 4
- b) For how long should a patient be fasted prior to anaesthesia? Is there any special consideration for young animals or species with a high metabolism to be fasted? 3
- c) What combination of drugs makes up a neuroleptanalgesic? Mention at least three neuroleptanalgesic combinations commonly used in veterinary practices. 5
3. a) What are the components of anaesthesia machine? What anaesthetic equipment should be checked prior to use? 4
- b) What should you monitor during anaesthesia? What are the potential risks for receiving anaesthesia? 4
- c) "Eye position pupil size and light response indicate anaesthetic depth"- Justify it. 4
4. a) What fluids should I choose for an anaesthetized patient? What are the reasons for intravenous fluid administration during anaesthesia? 4
- b) What rate of fluid administration is appropriate for anaesthetized animals? What are signs of fluid overload during anaesthesia? 3
- c) How will you calculate the amount of fluid required for an adult 22kg dog with 8% dehydration? On the history, it was evaluated that, the dog vomited 100ml of fluid overnight. 5

**SECTION-B**

5. a) Define surgery. What types of surgery do veterinarians do? 3
- b) What are the common sites for laparotomy in animals? Why is left flank approach commonly preferred in ruminants? 3
- c) Write down the causes, symptoms and treatment of ruminal impaction in a cow. 5
6. a) Explain why the rumenotomy is different from rumenostomy? 2
- b) Mention the contents of a typical hernia with a schematic diagram. What happens if you leave an umbilical hernia untreated? 5
- c) Is umbilical hernia painful? How do you treat an umbilical hernia in a calf? 5
7. a) Define epiphora, entropion, chalazion and ptosis. What does icteric mucus membrane indicate? 2
- b) What is the difference between disbudding and dehorning? How will you treat a case avulsion of horn in a cow? 4
- c) How will you treat an aural hematoma in a dog? What happens if a dog's aural hemtoma is left untreated? 6
8. Write short notes on any four of the followings: 3x4 =12
  - a) Stages of surgical anaesthesia
  - b) Age, anaesthesia and surgical protocol for castration in goat
  - c) Spaying in cat
  - d) Omentopexy in a cow
  - e) Glaucoma in dog
  - f) Treatment of a lacerated teat in cow

**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Gynaecology and Obstetrics (Theory)**

**Course Code: GOB – 401 (T)**

**Full Marks: 70, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer any **THREE (3)** questions from each section, where Question no.2 and 5 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1. a) Elustrate the mechanism of ovulation in cow. Mention the time for estrus, estrous cycle and ovulation in cow, mare, sheep, goat, dog and cat. 4.0+4.0=8.0  
b) Briefly describe the methods for heat detection in animals. 4.0
2. a) Sketch the endocrinology of : 2+2=4.0  
i) Estrous cycle in goat and  
ii) Pregnancy in mare  
b) Discuss the role of fetus in initiating the parturition. Sketch the process of parturition. Mention the symptoms of parturition in cow and mare. 7.0
3. a) Apply the following hormones in different clinical cases with doses and trade names. 6.0  
i) PGF2 $\alpha$  ii) P<sub>4</sub> iii) GnRH  
b) Describe the methods of pregnancy diagnosis by ultrasonography and rectal palpation in animals. Mention the criteria for pregnancy positive cases during examination by both of this two methods. 6.0
4. Write the treatment of the following cases (6x2)= 12.0  
a) Vaginal prolapse in a goat with 50 kg body weight.  
b) Metritis in a cow with 300 kg body weight.  
c) COD in a cow with 250 kg body weight.  
d) Pyometra in a cow with 250 kg body weight.  
e) Anestrous in a goat with 50 kg body weight.  
f) Retained placenta in a cow with 250 kg body weight.

**SECTION-B**

5. a) List the obstetrical problems may occurre in animal. 5.0  
b) Give the treatment with management of the following cases (3x2)= 6.0  
i). Dystocia due to bilateral carpal flexion  
ii). Bilateral shoulder flexion  
iii). Dystocia due to fetal oversize because of fetal death
6. a) Mention the causes of retained placenta. 'Retained fetal membrane has no influences in the fertility in cow.' Do you support this statement? Justify your statement. 6.0  
b) What are the extra embryonic fluids and membranes? What is hyppomans? 6.0
7. Write short notes on any three (3x4)= 12.0  
a) Causes of dystocia b) Silent heat c) Estrous synchronization iv) Puberty in female animal.
8. a) Name the hypothalamic hormones with their functions. Discuss the role of photoperiod in the control of reproductive functions and the endocrine mechanism involved. 6.0  
b) What are the causes of infertility in dairy industry in Bangladesh? Describe the methods to improve fertility in dairy industry in Bangladesh. 6.0

**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Preventive Veterinary Medicine (Theory)**

**Course Code: PVM-401 (T)**

**Full Marks: 70, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1. a) What do you mean by prevention and eradication of diseases? Briefly state the different phases of disease eradication program. 04
- b) Write down the factors of successful vaccination. Mention the causes of vaccination failure. 05
- c) Differentiate ring vaccination from blanket vaccination. 02
2. a) Why zoonotic diseases are important in veterinary medicine? Mention 10 important zoonotic diseases of animal that naturally transmitted between animals and human. 05
- b) Do you think that rabies is a deadly zoonotic disease? How do you control this disease in wild and municipal environment? 04
- c) Mention the importance of trichomoniasis in cattle in our country. 03
3. a) What do you mean by early warning of diseases? Who are the persons involved in early warning of an emerging disease? 05
- b) Enlist 10 vector borne, 5 soil born and 5 airborne diseases of animals in Bangladesh. 03
- c) How we can control the protozoal diseases in ruminants in Bangladesh? 04
4. a) Define hygiene and biosecurity. What are the major components and goals of biosecurity? 04
- b) Mention the different steps of operational biosecurity procedures applied for broiler parent stock. 04
- c) Briefly describe the quarantine and health screening protocols for wildlife prior to translocation and release into the wild. 04

**SECTION-B**

5. a) Veterinary medicine is an economic medicine explains. 03
- b) What is surveillance? Briefly describe the classification of surveillance. 04
- c) What are the objectives of surveillance? How risk analysis is made for surveillance? Enlist the general recommendation for the surveillance. 04
6. a) Mention 10 common reproductive goals that help to get one calf per cow per year. 04
- b) Write a comprehensive plan to prevent and control bovine mastitis. 04
- c) Write short note on "Pandemic and transboundary". 04
7. a) Define herd health. How will you differentiate the word "Herd Health" from "Reproductive Health"? 04
- b) Briefly state the role of routine functions of veterinarians that increase the production and reproduction of dairy animals. 04
- c) Enlist the nutritionally related dairy herd diseases. Enumerate the nutritional strategies to prevent milk fever in a cow. 04
8. a) Mention the name of 5 national and 5 international organizations that work on animal disease prevention. 04
- b) Briefly describe the general principles of controlling avian influenza in Bangladesh. 04
- c) What are the control strategies of common nematodal and trematodal diseases in livestock? 04

**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Farm Animal Medicine (Theory)**

**Course Code: FAM-401 (T)**

**Full Marks: 70, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. **1** and **5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1. a) Draw a diagram depicting anthrax pathophysiology in livestock. 03  
b) What are the possible risk factors for bovine anthrax in Bangladesh? 02  
c) How do you prevent anthrax in farm animals? 03  
d) Write down the line of treatment of anthrax in cattle. 03
2. a) Tabulate the diseases caused by different types of *Clostridium perfringens*. 02  
b) Write down the epidemiology of black quarter. 03  
c) What issues should be considered when diagnosing listeriosis in farm animals? 03  
d) Write down the diagnosis, treatment and control of malignant edema in cattle. 04
3. a) Write down the economic importance and typical clinical findings of dermatophilosis in cattle? 03  
b) Differentiate lumpy jaw from wooden tongue. 02  
c) Write down the transmission and diagnosis of tuberculosis. 03  
d) Write down the Pathogenesis and Line of treatment of FMD. 04
4. a) What is strangles in horse and how can you diagnose it? 04  
b) Explain the treatment protocol of actinomycosis in livestock? 04  
c) Why animal with paratuberculosis defecate pea soup like faeces? 04

**SECTION-B**

5. a) How you will plan to control FMD in an endemic area? 04  
b) Relate the symptoms of LSD and sheep pox in relation to their etiology. 03  
c) Write down the diagnosis and treatment of hemorrhagic septicemia in buffaloes. 04
6. a) Explain the likelihood of soil-borne disease occurrence in Bangladesh under various livestock production systems. 04  
b) How is tetanus organism transmitted in farm animals? What are the tetanus prevention measures for animals? 04  
c) Categories the clinical symptoms of paratuberculosis in cattle and goat. 04
7. a) How can you differentially diagnose rabies from similar disease under field condition? 04  
b) Write down the post-exposure vaccine schedule of rabies in cattle, sheep, and goat 04  
Write down the clinical signs and Symptoms of PPR in goat. How will you treat  
c) a goat suffering from PPR? Write down the control measure of PPR. 04
8. a) Discriminate between tetanus and botulism pathogenesis. 04  
b) A 20 kg body weight buck is suffering from tetanus for 12 hrs. Write down the line of treatment for the patient and predict the treatment outcome. 04  
c) Relate the clinical signs of BQ in relation to disease pathogenesis. 04

**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Animal Welfare and Veterinary Ethics(Theory)**

**Course Code: AWE-401 (T)**

**Full Marks: 35, Time: 2 Hours**

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section, where question number **5** is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1. a) What are the five freedoms we consider ensuring animal welfare? 3  
b) How much the people in Bangladesh respect animal welfare? Justify briefly in the light of the five freedoms? 3
2. a) Write down common frauds in selling livestock and livestock products and what are the penalties? 3  
b) How many quarantine stations we have for livestock disease screening? What are the duties and power of quarantine officer at a border quarantine station? 2  
c) Why the vets are responsible for better welfare of animal and how they will play the role? 1
3. a) Differentiate between animal rights and animal welfare. Enlist ethical theories. 2  
b) Enumerate the actions can be termed under cruelty against animals as per Animal Welfare Act, 2019. 2  
c) Write down the members of the Bangladesh Veterinary Council Committee under BVC ACT, 2019. 2
4. a) Enlist the on-farm welfare issue identified at dairy farm and improvement strategy for economically sustainable dairy farm. 3  
b) What are the responsibilities of a registered veterinarian as per veterinary oath? 3

**SECTION-B**

5. a) List the veterinary legislation of Bangladesh. 1  
b) State the veterinarian oath. Write the principles of veterinary ethics. 2  
c) What are the purposes of transport of animal? List the welfare indicators during loading and unloading of cattle. 2
6. a) What are the welfare problems of broiler production in Bangladesh? Define legislation and ACT. 2  
b) What are the humane methods of killing animals? 2  
c) How will you control free-roaming dogs in Bangladesh? 2
7. a) What is the humane end point of laboratory animal? Briefly discuss about 3R's. 2  
b) Briefly discuss the actions of a vet official when an animal needs urgent slaughter. 2  
c) Write down the process of sending feed sample to a lab under Animal Feed Rule, 2013. 2
8. a) Describe the common frauds in dairy and beef animal business. 2  
b) Describe the penalties under "Slaughter and Meat Quality Control ACT, 2011. 2  
c) What are the conditions to be met for a farm registration? Which ACT has explained those conditions and requirements? 2

**Chattogram Veterinary and Animal Sciences University**  
**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**  
**Course Title: Entrepreneurship and Business Management(Theory)**  
**Course Code: EBM-401 (T)**  
**Full Marks: 70, Time: 3 Hours**

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. **1** and **5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1.
  - a) If you like to be a good farm manager, show the general skills you need to develop. 3
  - b) Mention a few principles of management proposed by Fayol. 4
  - c) Describe the general functions of management. 4
  
2.
  - a) Discuss the factors affecting entrepreneurial growth. 4
  - b) What are the challenges faced by women entrepreneurs in Bangladesh? 4
  - c) Illustrate the problems and prospects of rural entrepreneurship development in Bangladesh? 4
  
3. Suppose you are a newly recruited farm manager of a big commercial dairy farm.
  - a) Explain the factors you will consider while hiring the farm workers. 4
  - b) Propose some ideas on how to keep the farm workers motivated for their job. 4
  - c) Describe how you will direct them so that the farm can achieve its targets. 4
  
4.
  - a) "Leader is a change-maker". Justify the statement. 4
  - b) Explain the steps in the strategic management process. 4
  - c) Compare the features of sole proprietorship, partnership and corporation. 4

**SECTION-B**

5.
  - a) Elaborate the elements of a typical business plan. 6
  - b) Compare between leader, entrepreneur and manager. 3
  - c) Clarify the common myths about entrepreneurs. 2
  
6.
  - a) Describe the essential qualities of an agribusiness entrepreneur. 4
  - b) Narrate the impact of COVID-19 on small business entrepreneurs. 4
  - c) Is management a profession? Justify your answer. 4
  
7. Suppose you are working as marketing manager at Padma Meat, a new company in the processed meat industry. They are planning to launch their product in Chattogram market. Based on this, answer the following management queries.
  - a) Write the macro-environmental factors you will consider while planning for your business. 4
  - b) Propose mission and vision statement for Padma Meat. 4
  - c) Develop three SMART business objectives for the company. 4
  
8.
  - a) Describe the five C's of the entrepreneurship ecosystem. 4
  - b) Mention the major functional areas of a business. 4
  - c) Write some techniques for motivating your subordinates. 4

**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Veterinary Epidemiology(Theory)**

**Course Code: VEP-401 (T)**

**Full Marks: 35, Time: 2 Hours**

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. **1** and **5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

**SECTION-A**

1. a) Classify disease pattern with examples. 03  
b) Define prevalence. Classify prevalence with examples. 03
2. Lumpy skin disease (LSD) is a viral disease of cattle and water buffalo that causes low mortality; however, the disease can result in animal welfare issues and significant production losses. The disease is spread primarily by biting insects such as certain species of flies, mosquitoes and possibly ticks. The prevalence of LSD is quite high in cattle population in Chattogram. Based on the background answer the following questions:  
a) Find the outcome and different determinants with classification. 4.0  
b) What is the difference between outcome and exposure? 2.0
3. a) What measure we consider identifying potential risk factors associated with the occurrence of a disease or outcome in a population? 2.0  
b) Distinguish those measures from each other with justification. 4.0
4. a) Draw the schematic diagram of a cross sectional study. 03  
b) Compare the features of cohort, case-cohort, and cross-sectional study designs. 03

**SECTION-B**

5. You are assigned to conduct a study to estimate incidence of X disease in poultry in Patiya. The results will be used to control or reduce the level of disease occurrence.  
a) Write your chosen study design and in schematic diagram. 03  
b) List different biases that may be occurred in your selected study design. How you can deal those biases? 02
6. a) Briefly describe the steps of an outbreak investigation. 03  
b) State the relationship between prevalence and incidence. 03
7. a) Write down the criteria of a diagnostic test used in outbreak investigation or in a disease surveillance programme and define them. 03  
b) Write down the relationship between predictive values (positive and negative) and a disease prevalence. Is there any relationship between test criteria and a disease prevalence? 03
8. Write short notes on the following (Any 3) 3x2=06
  - a) Reverse causality
  - b) Hills criteria
  - c) Probability sampling
  - d) Intervention study



**Chattogram Veterinary and Animal Sciences University**

**DVM 4<sup>th</sup> year 1<sup>st</sup> Semester Final Examination 2021**

**Course Title: Avian Pathology (Theory)**

**Course Code: APT-401 (T)**

**Full Marks: 35, Time: 2 Hours**

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section where question No. 1 is compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer together)

**SECTION-A**

1. a) Enlist the poultry diseases caused by virus upto 60 days of age. 1  
b) Write down the causes and pathology of necrotic enteritis and cecal  
cocciidiosis. 4
2. a) Write down the post-mortem findings of IBD. 2  
b) Enlist the granulomatous diseases of poultry. Write down the pathogenesis and  
pathology of brooder pneumonia. 4
3. a) Enlist the lesions of different forms of mycotoxicosis. 2  
b) Name five duck diseases prevalent in Bangladesh. Describe about anatipestifer  
in duck. 4
4. a) Describe the pathology of different forms of colibacillosis in poultry. 5  
b) Write down the pathognomonic lesions of histomoniasis in turkey. 1

**SECTION-B**

5. Enlist the immunosuppressive and vertically transmitted diseases in poultry. 6  
Write down the pathogenesis and pathology of Newcastle disease.
6. Enlist the diseases of poultry where respiratory problem is common. Describe 6  
the pathogenesis and pathology of mycoplasmosis.
7. a) Write down the pathogenesis and pathology of duck viral enteritis. 4  
b) Mention the post-mortem findings of duck viral hepatitis. 2
8. Write down the post-mortem findings of the following diseases (any three): 3×2=6  
a) Avian influenza  
b) Infectious bronchitis  
c) Fowl cholera  
d) Fowl typhoid