

Chattogram Veterinary and Animal Sciences University
DVM 3rd year 2nd Semester Final Examination-2021
Course Title: Toxicology
Course code: TOX-302(T)
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer three (3) questions from each section where questions 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) Differentiate forensic medicine with clinical Toxicology. Write down the scope of Veterinary Toxicology with its history 3
 b) What is universal antidote? Mention few commercially available products that contain activated charcoal. 4
 c) Classify poisons on the basis of mode of action with examples. 4
2. a) Classify insecticide with examples. 2
 b) Write down the clinical signs, mode of action, diagnosis and treatment of organophosphorus poisoning in cattle. Why antidote of organophosphorus is given at different routes and why it should be repeated after 8-12 hours? 8
 c) What do you mean by cumulative effect of poisons? 2
3. a) Define mycotoxicosis with classification and examples. What are the factors associated with aflatoxicosis. How will you manage and treat aflatoxicosis in broiler farm. 4
 b) How will you diagnose and treat aflatoxicosis in large animals? 4
 c) How you will diagnose and treat acute arsenic poisoning in cattle? 4
4. a) Enlist different types of glycosides present in plant with examples. 4
 b) Briefly describe the mechanism of toxicity, clinical signs, diagnosis and treatment of oleander poisoning. 5
 c) In which poisoning the clinical signs are the like that tetanus? Write down its source and clinical signs. 3

SECTION-B

5. a) Define prescription. Write down the prescription of (I) Nitrate poisoning in Cow, (II) Snake bite in Cat, (III) Salt poisoning in Sheep and (IV) Puffer fish poisoning in Cat 6
 b) List the samples to be collected for toxicological analysis (with preservatives) for urea, copper and organophosphorus poisoning cases. 6
6. a) What do you mean by Environmental Toxicology? How air and water become polluted in Bangladesh. Write down the air polluted diseases with their common pathogenesis in pet animals with treatment and prevention. 4
 b) Write down the source, clinical signs and treatment of Naphthalene, Fire extinguishing fluid and Morphine. 4
 c) What are the different sources of radiation? Name the organs most susceptible to radiation. 4
7. a) What do you mean by spot test? How do you conduct spot test for Cyanide, Alkaloid and Strychnine poisoning cases. 4
 b) What do you mean by "Alkali disease"? Write down the diagnosis and treatment of Selenium poisoning in poultry. 4
 c) Write down five poisonous plants with their active principles and antidote in livestock. 4
8. Write Short notes (Any four) 4x3
 a) Zootoxins, b) Drug Toxicity, c) Botulism, d) Radiation Hazard, e) Treat Disease and f) Microbial and Food Toxicity = 12

Chattogram Veterinary and Animal Sciences University
DVM 3rd year 2nd Semester Final Examination-2021
Course Title: General Surgery, Lameness and Soundness (Theory)
Course code:-GLS-302 (T)
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer three (3) questions from each section where questions 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

- | | | |
|----|---|--------|
| 1. | a) Define surgery. Why surgery is important for animal? | 4 |
| | b) Describe the correction procedure of complicated fracture by external fixations. | 4 |
| | c) Define tumor and neoplasm. How will you differentiate between benign tumor and malignant tumor? | 3 |
| 2. | a) Classify wound based on history. | 4 |
| | b) Briefly describe the factors that affecting wound healing and how will you manage open wound? | 4 |
| | c) How will you diagnose and differentiate naval ill and maggot infestation in a calf under field conditions. | 4 |
| 3. | a) An active and alert dog suffering from non-inflammatory swelling and uniform fluctuation on palpation. What is your presumptive diagnosis and how will you treat that? | 4 |
| | b) What are the conditions you have considered to be breeding soundness in a stallion? | 4 |
| | c) Write down the certificate of soundness in a cow. | 4 |
| 4. | Write short notes on the followings (Any three) | 4×3=12 |
| | a) Knuckling in a calf | |
| | b) Dermoid cyst in a dog | |
| | c) Sand crack in a horse | |
| | b) Lameness | |

SECTION-B

- | | | |
|----|---|---|
| 5. | a) What is inflammation? What are the causes that are responsible for inflammation? | 3 |
| | b) What are the different techniques usually followed for the treatment of acute inflammation? | 4 |
| | c) How will you diagnose and manage a case of sinus in cattle? | 4 |
| 6. | a) Classify hip dislocation or subluxation. "Slippery concrete floor is the main cause of hip dislocation or sub luxation"-Justify. | 4 |
| | b) What are predisposing factors of hip dislocation in animals? | 4 |
| | c) Distance inspection in a dairy farm you found about 10% cows have "Arched back". What diagnosis you made and how will you manage it? | 4 |
| 7. | a) What do you mean by suture? Narrate the quality of an ideal suture. | 4 |
| | b) Classify suture materials with their compositions and uses. | 4 |
| | c) Quill suture is usually applied in vaginal and uterine prolapse-why? | 4 |
| 8. | a) Describe ring bone in horse. | 4 |
| | b) How to diagnose and manage ulcer in cat? | 4 |
| | c) Explain surgical management of foot rot in cattle and Keratoma in horse. | 4 |

Chattogram Veterinary and Animal Sciences University

DVM 3rd year 2nd Semester Final Examination-2021

Course Title: Pathology of Infectious Diseases

Course code: -PID (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer five (5) questions from each section. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) Define miliary tuberculosis. How a tubercle nodule is formed in bovine tuberculosis? 3
- b) Mention the transmission, pathogenesis and pathology of black quarter. 4
2. a) Write down five (5) scientific names of organisms causing abortion in ruminants. 3
- b) Write down the pathogenesis and pathology of leptospirosis in cattle. 4
3. a) Make a list of diseases where vesicle is formed. 2
- b) Mention the transmission, pathogenesis and pathology of foot and mouth disease. 5
4. a) How can you differentiate babesiosis form anaplasmosis? 2
- b) Describe briefly the transmission, pathogenesis and pathology of lumpy skin disease in cattle.
5. a) Write down the pathology of canine parvoviral infection and infectious canine hepatitis. 3
- b) Write a short note on contagious bovine pleuropneumonia. 3
6. Write short note on any two (2) of the followings: 3.5X2=7
 - a. Calf scour
 - b. Mastitis
 - c. Ring worm

SECTION-B

7. a) What do you mean by incubation period and inclusion body. 3
- b) Write down the important factor in pathogenesis of infectious diseases. 3
- c) Define virulence and carrier state. 1
8. What is verminous pneumonia? Write down the pathogenesis and pathology of verminous pneumonia in cattle. 7
9. a) In which bacterial disease there is formed 'Zenker's necrosis' in skeletal muscle? Write down its pathogenesis and pathology. 5
- b) Write down the gross lesions of anthrax. 2
10. a) Write down the microscopic lesions of the following diseases (any four): 1.5X4=6
 - i. Rota viral diarrhoea
 - ii. Rabies
 - iii. Johne's disease
 - iv. Mad cow disease
 - v. Papillomatosis
- b) What is the relationship between the rinderpest virus and PPR virus. 1
11. Enlist five granulomatous diseases. Write down the pathogenesis and pathology of brucellosis. 7
12. a) Write down the pathology of fascioliasis in cow. 4
- b) Write a short note on hydatidosis/echinococcosis. 3

Chattogram Veterinary and Animal Sciences University

DVM 3rd year 2nd Semester Final Examination 2021

Subject: Immunology and Serology (Theory)

Course Title: - IMS 302 (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. 4 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Illustrate evolution of immune system from lower animal to higher mammals in a tabular way. 3.0
b) Distinguish adaptive and innate immunity in a tabular way. 3.0
c) Write an overview of immune response in vivo with neat diagram. 3.0
2. a) What are phagocytic / sentinel cell? Summarize different granules contain by neutrophil. 2.0
b) What is toll like receptor (TLR)? Why are they called so? Mention different ligand molecules with sources that bind with specific TLR in a tabular way and also other receptors those are found in a neutrophil with corresponding ligand molecule. 5.0
c) Illustrate mechanism of emigration of neutrophil from blood vessel. 2.0
3. (a) Define cytokine. What are the properties of cytokines? 3.0
(b) Enlist the salient features of a good antigen. 3.0
(c) Differentiate between MHC Class I and MHC class II molecule 3.0

SECTION-B

4. a) Define vaccine. Differentiate between live and killed vaccine. 3.0
b) What is adjuvant? Mention some examples of adjuvant. Write down the mechanism of adjuvant in terms of immune response. 3.0
c) What are adverse consequences found in vaccination? Differentiate between Arthus reaction from type I hypersensitivity reaction.. 2.0
5. a) What is hypersensitivity? What is the basis of classification of different types of hypersensitivity? 2.0
b) Classify common allergens on the basis of port of entry. 2.0
c) Explain type III and type IV hypersensitivity. 5.0
6. (a) Distinguish different immunoglobulin (Ig) in a tabular way. 3.0
(b) Summarize class I and class II MHC pathway of antigen processing. 6.0

Chattogram Veterinary and Animal Sciences University
DVM3rd Year 2nd Semester Final Examination, 2021
Course Title: Livestock Economics and Marketing (Theory)
Course Code: LEM: 302 (T)
Total Marks: 70.0; Time: 03 hours

*Answer **any 03 (Three)** questions from each section where question no. 1 and 5 are mandatory. Figure in the right margin indicate full marks. Use separate answer script for each section*

Section-A

1. a) Distinguish between marketing and selling. 2
b) Discuss the rationale of studying livestock marketing course as a student of DVM. 4
c) Briefly discuss the approaches of livestock marketing. 5
2. a) Define marketing channel. 2
b) Illustrate the elements of marketing Channel. 4
c) What factors govern the choice of marketing channel? How does a trade channel disrupt? 6
3. a) Write the comparison between monopoly and perfect competitive market. 3
b) Draw and discuss the milk marketing system in context of Bangladesh. 5
c) Write the limitations of livestock product marketing system. 4
4. Suppose you are working as a marketing manager at a company in an agro-based firm. Your company wants to launch a new packaged liquid milk in Chattogram.
a) Develop hypothetical product strategies for one of particular product. 4
b) How will you set price for the product? 4
c) What should be your promotional strategies? 4

Section-B

5. a) Why does demand curve slope downward? 3
b) What are the factors that affecting the demand of livestock products? 4
c) State and discuss the law of diminishing return. 4
6. a) Define bank and banking. 3
b) What are the functions of a central bank? 4
c) Illustrate national income. Describe the production method to measure the national income in Bangladesh. 5
7. a) Define breakeven point. 2
b) Suppose the fixed cost of a factory in Tk. 100,0000, the per unit selling price is Tk. 600 and per unit variable cost is Tk. 400, what is the breakeven point of this factory. 5
c) Explain the different analytical frameworks (discounted) of farm business analysis. 5
8. Write short notes on (any three of the following): 4x3=12
a) Malthusian population theory
b) Explicit vs. Implicit cost
c) Marginal Rate of Technical Substitution (MRTS)
d) Consumer equilibrium

Chattogram Veterinary and Animal Sciences University

DVM 3rd year 2nd Semester Final Examination-2021

Course Title: Protozoology

Course code: 302(T)

Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer three (3) question from each section where question 1 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) Name three genera with two species of each of Eimeriidae of veterinary importance. 1
- b) Write down the procedure of diagnosis, treatment, control and prevention of coccidiosis in commercial chicken. 4
2. a) Enlist different blood protozoa of domestic and pet animals with their hosts and vectors. 3
- b) Illustrate the life cycle and control features of Anaplasmosis in goat. 3
3. a) List the protozoa causing abortion in cattle. 1
- b) What are the clinical features and control steps of Neosporosis in cattle. 2
- c) How will you prevent Toxoplasmosis in cat? How can a human get infected with *Toxoplasma* sp.? 3
4. a) Briefly describe the locomotor strategies of protozoa with examples. 3
- b) Draw and label different developmental stages found in the life cycle of trypanosomes. 3

SECTION-B

5. a) Outline the differences between the cyst and trophozoite of *Balantidium coli*. 2
- b) Draw and label a typical *Giardia* species that infect dogs. 2
- c) How will you prevent 'protozoan diarrhea' from a dairy herd? 2
6. a) Outline the morphology features, pathological significance, clinical signs and diagnosis of *Tritrichomonas foetus* in cattle. 3
- b) What is the special feature in life cycle of *Histomonas* sp. where it harbors a nematode species. 1
- c) Discuss the life cycle of *Sarcocystis* sp. 2
7. a) Compare three veterinary important species of *Theileria* in respect of host, vector, disease and distribution. 3
- b) Briefly describe the clinical and laboratory diagnostic techniques of Theileriosis in ruminants. 3
8. a) Write short notes (any two) to the followings: 3x2=6
 - i. Surra in mare.
 - ii. Cryptosporidiosis in goat.
 - iii. Leishmaniasis in dog.

Chattogram Veterinary and Animal Sciences University
DVM 3rd year 2nd Semester Final Examination-2021
Course Title: Dairy Science
Course code: DSC (T)
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer three (3) questions from each section where question number 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) State the general considerations in breed selection for a dairy farm. 4
b) What do you mean by Dairy Science, Dairy Technology and Dairy Industry? 3
c) How will you ensure fair price for raw milk in a milk processing industry? 4
2. a) Define milk and market milk. 2
b) What do you mean by pasteurization of milk? 2
c) Describe briefly the HTST method of milk pasteurization. 8
3. a) Discuss the importance of milk chilling in Bangladesh. 2
b) Discuss the routine activities in a milk chilling plant. 7
c) Give a short note on hygienic milk production. 3
4. a) Write the role of different ingredients in ice-cream making. 3
b) Enlist the famous indigenous dairy product of Bangladesh with their origin. 2
c) What are the possible causes of more fat losses through skim milk during cream separation? 7

SECTION-B

5. a) How the dairy business of Bangladesh was affected during the COVID-19 pandemic period? 6
b) Discuss the history of dairy industrialization in Bangladesh. 5
6. a) Show the manufacturing procedure of sweet dahi via a flow diagram. 4
b) Analyze the symbiotic relationship between the bacterial strains used in yogurt making. 4
c) Mention, the defects, causes and remedies of dhai. 4
7. a) What do you mean by Cheddaring? Write the manufacturing procedure of Cheddar cheese. 7
b) Mention the defects, causes and remedies of Cheddar cheese. 5
8. Write short notes on any four of the following: 3×4 = 12
a) Toned milk
b) Methods of milk collection
c) Chemical properties of milk
d) Ghee
e) Butter churning
f) UHT milk

Chattogram Veterinary and Animal Sciences University
DVM 3rd year 2nd Semester Final Examination-2021
Course Title: General Medicine and Production diseases (Theory)
Course code: GPD-302(T)
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer three (3) questions from each section where question number 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

- | | | | |
|----|----|---|---|
| 1. | a) | Define and classify Veterinary medicine. | 3 |
| | b) | Define allergy and anaphylaxis with examples. How will you assess the level of dehydration in a calf? | 4 |
| | c) | Define fever. Make a contrast between hyperthermia and heat stroke. | 4 |
| 2. | a) | Enumerate infectious causes of stomatitis in cattle. | 3 |
| | b) | Write down the causes of choke in animals. Prepare the line of treatment for oesophageal obstruction in a cow. | 5 |
| | c) | Enumerate the causes, clinical signs and the line of treatment of bloat in ruminants. | 4 |
| 3. | a) | Differentiate among epistaxis, hemoptysis and hematemesis. Write down the common treatment of them. | 5 |
| | b) | Differentiate Pneumonia, Aspiration pneumonia and Verminous pneumonia. | 3 |
| | c) | Write down the manifestation of respiratory system occurred due to forced drenching. How would you diagnose and manage the condition? | 4 |
| 4. | a) | Define metabolic disease. Why high yielding dairy cow is frequently affected with metabolic disease? | 4 |
| | b) | Discuss the stages of clinical abnormalities of a patient suffering from hypocalcaemia. | 4 |
| | c) | Write down the causes, clinical signs and the line of treatment of equine rhabdomyolysis. | 4 |

SECTION-B

- | | | | |
|----|----|---|---|
| 5. | a) | Write down the etiology and clinical signs of cystitis in a doe. | 3 |
| | b) | Sketch the formation of obstructive urolithiasis in buck. | 4 |
| | c) | Write a short note on diabetes in dog. | 4 |
| 6. | a) | Classify vitamins. What are the roles of vitamin A and E in animal reproduction. | 4 |
| | b) | Write down the clinical manifestations with suggestive treatment of following conditions- | 5 |
| | | i) Zinc deficiency | |
| | | ii) Copper deficiency | |
| | | iii) Iron deficiency | |
| | c) | How would you differentiate grass tetany from tetanus? | 3 |
| 7. | a) | Describe the principles of diagnosis of common manifestations of integumentary system. | 3 |
| | b) | What do you mean by urticaria and pityriasis? Make a comparison between hyperkeratosis and parakeratosis. | 4 |
| | c) | Define photosensitization. Write down the common signs and treatment of it. | 5 |
| 8. | a) | Write down the principles of manifestation of nervous system dysfunction. | 4 |
| | b) | Write down the line of treatment of gastritis. | 3 |
| | c) | Write down the line of treatment of any two of the followings: | 5 |
| | | i) Polioencephalomalacia | |
| | | ii) Foot rot | |
| | | iii) Fibrous osteodystrophy | |