

(Figures in the right margin indicate full marks. Answer any Five (5) questions from each section.
Use separate answer script for each section.)

SECTION-A

1. a) Enlist the viruses that form intra-nuclear and intra-cytoplasmic inclusion bodies. 2
b) Briefly describe the pathogenesis and pathology of rabies in cattle. 5
2. a) What do you understand by contagious and environmental mastitis? What are the common causes of mastitis in dairy cattle? 2
b) Briefly describe the pathogenesis and pathology of streptococcal mastitis. 5
3. a) Enlist the fungal agents that cause local and systemic infection in cattle and dog. 2
b) Granulomatous inflammation in lung occurs in which fungal disease? Write down its pathogenesis and pathology. 5
4. a) Write down the etiology and pathology of woody tongue disease. 4
b) Write down the microscopic lesions of lumpy Jaw. 3
5. a) Briefly describe the difference in pathogenesis of fascioliasis caused by young and adult liver fluke in cattle. 4
b) Write down the microscopic lesions of lung worm infection. 3
6. a) In which viral canine disease different type of epithelial cells of the body becomes affected? 1
b) Write down the pathogenesis and pathology of the above mentioned disease. 6

SECTION-B

7. a) Describe the general pathogenesis of bacterial infections. 2
b) Describe the transmission and pathogenesis of tetanus in castrated kids. 5
8. a) What are the common characteristics of PPR? Write down some significant lesions of PPR in goats. 4
b) What is CBPP? Describe the pathology of CBPP. 3
9. a) Write down the etiology of ring worm. Describe the mechanism of formation of ring like lesion in ring worm infection. 3
b) Write down the transmission pattern and pathogenesis of anaplasmosis. 4
10. a) What are the viral agents that cause vesicular, ulcerative and necrotic stomatitis? 2
b) Write down the microscopic lesions of viral disease that cause vesicular stomatitis in adult cattle. 3
c) What is "tiger heart disease"? 2
11. a). Enlist bacterial diseases that cause abortion in domestic animals. 2
b). Describe the pathogenesis of retention of placenta in a bacterial abortifacient disease in cattle. 3
c). Write down the gross lesions in fetus from a brucella affected down. 2
12. Write short notes on (any two): 3.5x2 = 7
a). Glanders, b). Canine parvoviral infection, c). Listerial abortion.

Chittagong Veterinary and Animal Sciences University (CVASU)

DVM Third Year Second Semester Final Exam-2017

Course Title: Livestock Economics and Marketing (Theory)

Course Code: LEM-302 (T)

Total Marks: 70, Time: 3Hours

Answers should be *specific* and *brief*. All parts of a single question to be answered *without breaking the sequence*. Answer to any **4 (four) questions** from each section where **Question 1 and 6 are mandatory**.

SECTION: A

- 1) A) Define Economics. 2
B) Graphically explain the law of diminishing marginal utility. 6
- 2) A) Discuss the factors influencing the demand of livestock products. 4
B) How the equilibrium price determined with the supply and demand forces in the market? 5
- 3) A) Classify the market according to the nature of competition. 4
B) How the equilibrium price and quantity are determined in the monopoly market? 5
- 4) Briefly explain the following concepts.
a) Elasticity of demand 2
b) Marginal rate of Technical Substitution (MRTS) 2
c) Functions of money 2
d) Project analytical tools 3
- 5) A) Define Bank and Banking. Do you think micro-credit is a tool for poverty alleviation? Justify your answer. 5
B) Discuss the function of commercial bank in context of Bangladesh. 4

SECTION: B

- 6) A) Name the available livestock products in Bangladesh. Explain the importance of Livestock Products. 3
B) "Marketing is a process by which companies create value for customers and build strong customer relationships to capture value from customers in return"- Explain it with examples. 2
C) Give examples of Need, Want and Demand. 3
- 7) A) Identify 4 Pillars of Marketing Concept. 3
B) "As an entrepreneur we only need to be production focused. Market Focus is less important as higher production is the key to success". Do you agree? Justify your answer. 3
C) "Customer is the king in the Kingdom of Marketing"- Do you agree. Justify your answer. 3
- 8) A) Exemplify 4Ps of Marketing. 3
B) Mention the 4Cs against 4Ps? 2
C) Show the Marketing Process. 4
- 9) A) Define Marketing Channel. 2
B) Classify Marketing Channels and provide examples. 3
C) Suppose you are a Market Operation Manager of a newly established Poultry Feed Mill. Develop a marketing chain for your product. 4
- 10) A) Explain how Cooperative Marketing helps the dairy farmers in the case of Milk Vita. 2
B) Identify some challenges for a commercial dairy farming system in Bangladesh. 3
C) Predict possible opportunities and threats of Turkey Farm in Chittagong city. 4

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section of which question **1 and 5** are compulsory. Use separate answer script for each section.)

SECTION-A

1. a) Without inflammation healing is impossible, explain it. 4
b) Mention the clinical conditional diseases where warm and cold application is desirable, justify its application. 4
c) How will you differentiate following conditions: 3
(i) Lacerated from incised wound
(ii) Puncture from penetrating and perforating wound.
(iii) Degloving wound from shearing injury.

2. Write down the diagnostic procedures of following conditions: 6×2=12
a) Mature and immature abscess
b) Sinus and fistula
c) Burn, scald and frost bite
d) Dry and Moist gangrene
e) Ulcers
f) Yalk gall

3. Write short notes on following (any four): 4×3=12
a) Counter irritant
b) Counter opening
c) Lavage
d) Wound healing
e) Dermoid cyst

4. a) Define vices and blemishes with examples. Mention the leg markings in horse. 6
b) Write a soundness certificate for roan color mare of 7 years old 315 kg body weight and 16 hands height suffering from hip dysplasia. 6

SECTION-B

5. a) Enlist the different common lameness conditions in cattle and goat at SAQTVH. 4
b) Define paralysis and paresis. What are the possible causes of paralysis and how will you diagnose a dog suffering from hind limb paralysis? 4
c) Write down the line of treatment of paralysis. 3

6. Describe the treatment of following: 4×3=12
a) Corneal dermoid in a new born calf
b) Ulcer on the buttock of a dog
c) Subcutaneous cyst in a goat
d) Robert Johns bandage

7. How will you diagnose the following conditions? (any four) 4×3=12
a) Femur fracture in a dog
b) Hip dislocation in a goat
c) Upward patellar fixation in cow
d) Polyarthritis in a calf
e) Foot rot in a cow

8. a) What is an abscess? How will you convert an immature abscess to a mature abscess? 4
b) How will you treat a mature abscess on the thigh of a bull? 4
c) Describe the treatment of gid in a pregnant doe. 4

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination-2017
Course: **Toxicology (Theory)**
Course Code: **TOX-302**
Full Marks: 70; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section of which question no **1 and 5** are compulsory. Use separate answer script for each section.)

Section-A

1. a) Differentiate cyanide from nitrate poisoning. 4
b) How will you diagnose and manage a cattle affected by pesticide poisoning? 3
c) Explain the term "poison" and "Toxin". Classify the toxicant on the basis of target organ and toxicity potential. 4

2. a) How heme synthesis is inhibited in lead poisoning? 4
b) Write the toxic symptoms, postmortem lesion and the line of treatment of chronic lead poisoning in cattle. 4
c) An alive patient has been brought to you immediately after consumption of a poison. What would be the possible line of treatment to combat the toxicity? 4

3. a) Write the toxic principles, toxic symptoms and management of an alkaloid, a glycoside and a phytoprotein containing plants poisoning. 5
b) Write the source, mode of action, toxic symptoms and the line of treatment of urea poisoning in a bull. 4
c) Identify the cyanogenic plants mentioning their active principles. 3

4. a) A broiler flock does not gain its normal body weight upto 22 days without showing clinical signs of infectious cause. Some feed of the farm brought to laboratory what is the unwanted hazardous facts and how the agent cause toxicity? Write the appropriate correction and management of that flock. 5
b) What is venom? Differentiate venomous snake from non-venomous snake. 3
c) Discuss the treatment and management of snake bites and honey bee strings. 4

Section-B

5. a) What is "universal antidote"? How does antidote work against a toxicant? 2
b) A cattle show maniacal excitement with bellowing, staggering and crushing into objects for last 24-36 hours. There are also incoordination and muscular twitching. Criticize the case differentially with other toxic cases and treat the patient accordingly. 5
c) A farmer establishes a farm beside the river Jamuna. Enlist the metal toxicants on which animals could be affected. How will you diagnose and treat acute arsenic poisoning of that farm animal? 4

6. a) A goat brought to SAQTVH of which irregular urination with reddish color, green tinged fluid feces, yellow mucous membrane in eye. What kind of toxic substances do you expect? Summarize the toxic dose, mechanism of action and treatment of that toxicant. 4
b) What is alkali disease? Write down the clinical symptoms and treatment of alkali disease in common farm animal of Bangladesh. 3
c) Diagrammatically show the sources of radiation and what would be effect of it? How will you treat and manage the radiation effect? 5

7. a) What are the principle mechanism of ANTU and Red squill poisoning? How can you diagnose and treat them? 4
b) Mention some organophosphorus and organochlorine insecticides. Illustrate the factors of organochlorine toxicity with specific treatment. 5
c) Justify the differences between botulism and tetanus toxicosis. 3

8. Write short notes on any four of the followings: 4×3=12
 - a) Photosensitization.
 - b) Carbon monoxide poisoning.
 - c) Mushroom poisoning.
 - b) Obligate accumulator plants.
 - e) Drug residues in animal's tissue.

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination-2017
Course Title: General Surgery and Lameness (Theory)
Course Code: GLS-302 (T)
Full Marks: 70; Time: 3 Hours

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

Section-A

1. a) How metacarpal and metatarsal mid-shaft fracture of a 200kg HF heifer can be immobilized? 6
 b) Describe the techniques of correction of upward patellar fixation of a bullock. 5
2. a) Write down the soundness certificate for breeding purpose of a five year horse of 400 kg body wt having opacity in the right eye. 6
 b) How will you operate the interdigital fibroma in a cow using IVRA (intravenous regional anesthesia) and $\alpha 2$ agonist in standing condition of the animal? 6
3. Differentiate the followings 2X6= 12
 a) Elective Surgery and Emergency Surgery
 b) Hernia and Hematoma
 c) Phimosis and Paraphimosis
 d) Atresia ani and recto-vaginal fistula
 e) Malignant and benign tumor
 f) Cyst and abscess
4. Describe in short. 2X6= 12
 a) Treatment of naval and stitch abscess
 b) Surgical repair of aural hematoma
 c) Repair of teat fistula
 d) Squamous cell carcinoma of conjunctiva in a zebu cow
 e) Factors influencing surgical repair
 f) Wound healing

Section-B

5. a) Write down the economic importance of lameness in cattle. 2
 b) Mention the common lameness conditions in cattle, goat, dog and cat admitted at SAQTVH. 2
 c) Write down the diagnosis and line of treatment of subcutaneous cyst in a goat. 3
 d) What are the alternative treatment protocols of paralysis in a dog? 4
6. a) How will you diagnose a goat clinically suffering from fracture or sprain of radio-ulna? 3
 b) Classify fracture based on direction of fracture line. 2
 c) How will you evaluate fracture healing? What are the complications usually seen during fracture management? 4
 d) What are the techniques, implants and bandages used for fracture management? 3
7. a) Why inflammation is important for surgery? Enumerate the possible cause of inflammation. 3
 b) Write down the termination of inflammation in different situations. 3
 c) Illustrate the line of treatment of acute and chronic inflammation. 6
8. a) Define closed wound with example. What types of closed wounds are more common? Mention according to the species. 3
 b) Classify wound based on contamination. How will you differentiate them? 3
 c) What types of wounds are more common at SAQTVH and Why? 2
 d) What are the general principles of wound treatment? Justify them. 4

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination-2017
Course: **General Medicine & Production Diseases**
Course Code: **GPD-302**
Full Marks: 70; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section of which question **1 and 5** are compulsory. Use separate answer script for each section.)

Section-A

1. a) Define clinical medicine. Sketch the history of veterinary education in Bangladesh. 4
b) A dog is suffering from a disorder of oesophagus due to ingestion of hair balls. What is your presumptive diagnosis and its treatment? 3
c) How will you diagnose and treat a case of simple indigestion in compound stomach animal? 4
2. a) Define impetigo and urticaria. Write down the common signs and treatment of photosensitization in ruminants. 4
b) List possible diseases you may confuse with grass tetany and post parturient hemoglobinuria. Mention significant features to differentiate them. 4
c) What abnormal constituents you may found in urinary system dysfunctions? Write down the predisposing factors and line of treatment of urolithiasis in goat. 4
3. a) What are the common clinical manifestations of circulatory failure? 4
b) Define shock. What are the types of shock? How will you diagnose and treat a dog having cardiogenic shock? 4
c) Write down the etiology, clinical signs and treatment of foot rot in cow. 4
4. a) How will you diagnose a patient affected with osteodystrophy? Design a line of treatment for that animal? 4
b) What are the common signs of nervous disorder? Write down the principles of treatment of nervous exciting disorders in animal. 4
c) Define pneumonia. Enumerate the principles of treatment of a pneumonic goat. 4

Section-B

5. a) Define anemia. Classify different types of anemia. Compose a line of treatment of severely affected anemic patient. 6
b) Define acidosis. Compose a line of treatment of ruminal acidosis. How will you calculate the amount of NaHCO_3 needed for a 100kg cow affected with acidosis. 5
6. a) Define metabolic disease. Why high yielding dairy cow is more prone of metabolic diseases? Mention the synonyms of hypocalcaemia, hypomagnesaemia and hypoglycaemia. 4
b) Define azoturia. Mention the risk factors that influence causing azoturia in horse, suggest the line of treatment for it. 4
c) What would be the line of treatment and control measures of milk fever and ketosis in dairy cow. 4
7. a) Write down the abnormal constituents of urine. 3
b) Sketch the formation of obstructive urolithiasis in ruminants. 5
c) Describe the treatment of urolithiasis recently developed in CVASU teaching Veterinary Hospital. 4
8. Write short notes on any three: 3×4=12
 - (a) Aspiration pneumonia
 - (b) Polioencephalomalacia
 - (c) Foot rot
 - (d) Micro minerals in ruminants

Chittagong Veterinary and Animal Sciences University
DVM 3rd Year 2nd Semester Final Examination-2017
Course: **Dairy Science (Theory)**
Course Code: **DSC-302**
Full Marks: 70; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section of which question no **1 and 5** are compulsory. Use separate answer script for each section.)

Section-A

1. a) Write the sequence of dairy development history in Bangladesh. 6
b) List the pricing system of milk around the world. Which one is more justified to you and why? 5
2. a) What do you mean by Platform tests and what are those? 2
b) Show the manufacturing procedure of market milk in HTST method of pasteurization by a flow diagram. 4
c) Classify CIP chemicals with examples and list the steps of CIP procedure of bulk milk cooler. 6
3. a) Illustrate the common defects of butter with their causes and prevention. 6
b) How many kg of 32% fat containing cream and 2% fat containing milk will be required to make 1000kg of milk testing 4% fat? 6
4. Write short notes on (any four): 3×4= 12
a) Freezing point of milk.
b) Stoke's law
c) Physio-chemical properties of Ghee.
d) Rasogolla.
e) Composition of milk.

Section-B

5. a) How do genotype, stages of lactation and nutritional factor affects the quality and quantity of milk production? 6
b) Enlist the factors that are responsible for profitability of dairy farming in Bangladesh and explain any five of them. 5
6. a) What are the differences among Curd, Dahi and Yoghurt? 3
b) State the characteristics of a good quality Dahi. 3
c) Illustrate manufacturing steps of Dahi. 3
d) Shortly describe the nutritional and therapeutic properties of Dahi. 3
7. a) Mention the common steps for Cheese making. 3
b) Briefly describe the procedure of making Swiss Cheese. 5
c) What is meant by rennet? Classify rennet with examples. Write the commercial method of rennet making. 4
8. a) Illustrate the spray drying method of skim milk powder and whole milk powder production. 6
b) Write short note on any three (3) of the following: 3×2= 6
(i) Stabilizers
(ii) Emulsifiers
(iii) Milk ices and milk lollies
(iv) History of "Milk Vita"

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section of which question no 5 is compulsory. Use separate answer script for each section.)

Section-A

- | | | |
|----|--|-----|
| 1. | a) Draw and label a flagellated and ciliated protozoan parasites. | 2.0 |
| | b) Describe different modes of protozoan reproduction in brief. | 2.0 |
| | c) Differentiate holozoic nutrition from saprozoic nutrition of protozoa. | 2.0 |
| 2. | a) Enlist the <i>Eimeria</i> species of poultry and cattle. | 2.0 |
| | b) Describe caecal coccidiosis of poultry in brief | 2.0 |
| | c) How will differentiate the oocysts of <i>Eimeria</i> spp from those of <i>Cryptosporidium</i> spp, <i>Isospora</i> spp and <i>Toxoplasma</i> spp. | 2.0 |
| 3. | a) Write down the factors that causes babesiosis.. | 2.0 |
| | b) Formulate an effective control strategy against babesiosis in farm animals. | 2.0 |
| | c) How will diagnose East-coast fever in milking cow? | 2.0 |
| 4. | a) Enlist the semen borne protozoan infections of livestock. | 1.0 |
| | b) Describe harmful effects of <i>Tritrichomonas foetus</i> in bull. What measures would you take towards the prevention of semen borne protozoan infection? | 3.0 |
| | c) Write down the name of the vectors for <i>leucocytozoon simondi</i> , <i>Haemoproteus columbae</i> , <i>Theileria parva</i> , <i>Anaplasma</i> spp. | 2.0 |

Section-B

- | | | |
|----|---|-----------|
| 5. | Morphologically differentiate between the following terms with figures. | 2.5×2=5.0 |
| | a) Trophozoite and cyst of <i>Balantidium coli</i> | |
| | b) Promastigote and amastigote stages of <i>Leishmania donovani</i> . | |
| 6. | a) Enumerate the pathogenesis and clinical signs of the following protozoan infections (any two): | 2.5×2=5.0 |
| | i) <i>Leishmania donovani</i> in cattle | |
| | ii) <i>Toxoplasma gondii</i> in sheep | |
| | ii) <i>Babesia bovis</i> in cow | |
| | b) Define Gliding and Ciliary movement. | 1.0 |
| 7. | a) How can you diagnose the following protozoa infections at Laboratory? (any two): | 2.5×2=5.0 |
| | i) <i>Cryptosporidium bovis</i> | |
| | ii) <i>Entamoeba histolytica</i> | |
| | ii) <i>Anaplasma marginale</i> | |
| | b) Differentiate conjugation from schizogony. | 1.0 |
| 8. | a) Illustrate the life cycles of the followings protozoa (any two): | 3×2=6.0 |
| | i) <i>Eimeria tenella</i> | |
| | ii) <i>Toxoplasma gondii</i> | |
| | ii) <i>Hemoproteus columbae</i> | |