

**Chittagong Veterinary and Animal Sciences University**  
**Faculty of Veterinary Medicine**  
**Department of Medicine and Surgery (DMS)**  
**January-June Semester Final Examination 2014**  
**Sub: Veterinary Dermatology; Course Code: VED-601**  
**Full Marks: 40; Time 2 hours**  
**Answer any four (4) from the following questions**

- |   |   |  |   |
|---|---|--|---|
| 1 | a | Write down the principles of treatment of skin diseases in food animals.                                 | 3 |
|   | b | Describe terms used to identify skin lesions.  | 3 |
|   | c | Classify urticaria with their clinical findings, diagnosis and treatment.                                | 4 |
| 2 | a | Describe details of photosensitization.  | 6 |
|   | b | Write down the possible causes of hypotrichosis and hoof overgrowth in goats along with their treatment. | 4 |
| 3 | a | Write details of psoroptic mange in food animals.  | 8 |
|   | b | Enumerate the diseases produce skin lesions in cattle .  | 2 |
| 4 | a | Discuss nutritional therapy in dermatologic problems in cats.  | 6 |
|   | b | Write down the details of clinical findings and diagnosis of canine malassezia dermatitis.               | 4 |
| 5 | a | Discuss canine deep pyoderma with emphasis on its management.  | 5 |
|   | b | How will you treat defects in cornification of canine skin.  | 5 |

Good Luck

**Chittagong Veterinary and Animal Sciences University**  
**Faculty of Veterinary Medicine**  
**Department of Medicine and Surgery (DMS)**  
**January-June Semester Final Examination 2014**  
**Sub: Food Animal Medicine; Course Code FAM-601**  
**Full Marks: 40; Time 2 hours**  
**Answer any four (4) from the following questions**

- |          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>a</b> Describe Etiology of bovine mastitis in details   | <b>3</b>  |
|          | <b>b</b> Describe strategies for therapy and prevention of mastitis.   | <b>6</b>  |
|          | <b>c</b> What are the possible causes of failure of mastitis treatment   | <b>1</b>  |
| <b>2</b> | Describe the epidemiological features of the following diseases: 2.5X4<br>(i) Anthrax; (ii) Fasciolosis; (iii) PPR; (iv) Babesiosis  | <b>10</b> |
| <b>3</b> | Enumerate the line of treatment of the following diseases: 2.5X4<br>(i) Humpsure in a bull; (ii) Anaplasmosis in a cattle; (iii) Urea poisoning in a bull;<br>(iv) Hemorrhagic enteritis in calves | <b>10</b> |
| <b>4</b> | <b>a</b> Write down clinical signs, diagnosis and treatment of schistosomiasis in cows   | <b>5</b>  |
|          | <b>b</b> What is the difference between bovine viral diarrhea and mucosal disease complex  | <b>2</b>  |
|          | <b>c</b> Describe the salient features of different parasitic eggs that would help you to identify them under microscope.  | <b>3</b>  |
| <b>5</b> | <b>a</b> Describe prevention and control measures against FMD  | <b>4</b>  |
|          | <b>b</b> Write down the line of treatment of dermatomycosis  | <b>3</b>  |
|          | <b>c</b> Describe the diagnosis of bovine tuberculosis   | <b>3</b>  |

**Good Luck**

**MS in Medicine**  
**Dept of Medicine and Surgery**  
Sub: Zoonotic Medicine (ZOM-601)  
Jan-June Semester/2014,  
Semester Final Examination  
Full Marks: 40    Time: 2 hour

Figures in the right margin indicate full marks. Answer any four questions.

1. (a) Why zoonoses are more important in Veterinary Medicine? Mention 10 zoonotic diseases prevail in Bangladesh. 4  
(b) Write-down the synonyms of anthrax and Malta fever. What are the other causes that may confuse to diagnose the anthrax after death? 2  
(c) Briefly describe the different forms of anthrax in man. Write-down the diagnosis and treatment of it. 4
  
2. (a) What is BSE? How do you differentiate variant creutzfeldt- jakob disease from BSE? 4  
(b) How do you suggest preventing BSE both in animal and man? 2  
(c) How do you differentiate clinically bubonic plague from pneumonic plague? Provide the line of treatment of it. 4
  
3. (a) What is hydrophobia? How do you differentiate it from photophobia? 3  
(b) What is bait? How it uses in prevention of rabies in wild life? 2  
(c) Write-down the vaccination schedule of pre and post exposure bites of dog in animal and man. 5
  
4. (a) What are the synonyms of kalazar? What are the major hosts and vectors of this disease in the world. 2  
(b) Briefly describe the clinical signs and symptoms of kalazar in man and dog. 4  
(c) Write-down the name of vectors that transmit the sleeping sickness of man in Africa. Name other diseases produced by trypanosome in animals. 4
  
5. Write short notes on any two: 5x2=10  
(a) Glander's in Horse.  
(b) Birdflu in man  
(c) Microfilarial diseases in man & animals

**Chittagong Veterinary and Animal Sciences University**  
**Faculty of Veterinary Medicine**  
**Department of Medicine and Surgery**  
**Semester: January – June 2014**  
**Subject: Avian Medicine**  
**Course Code: AVM 601; Credit: 2**  
**Total Marks: 40**  
**Time: 2 (Two) Hours**

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

1. Write down the etiology, clinical signs, treatment, prevention and control of crop impaction in a female turkey. **10**
2. Describe the etiology, clinical findings, post mortem lesions, diagnosis, differential diagnosis, treatment, prevention and control of New duck disease. **10**
3. (a) Write down the clinical signs of aflatoxicosis in poultry (broiler and layer) with dietary protein concentration (ppm.). **04**  
(b) What do you understand by the term psittacosis and ornithosis? Write down the zoonotic importance of avian chlamydophillosis. **06**
4. (a) What are the diseases or disease conditions where sciatic nerve of chicken becomes enlarged and swollen? **03**  
(b) How will you differentiate them? **07**
5. Describe the etiology, clinical signs, post mortem lesions, diagnosis, differential diagnosis, treatment, prevention and control of Necrotic enteritis in chicks. **10**
6. (a) Which subtypes of Avian influenza (AI) are highly pathogenic for chickens? **02**  
(b) How will you differentiate Avian influenza (AI) from Chicken infectious anemia? **08**
7. Write the presumptive diagnosis & prescription of followings: **2X5 = 10**
  - (i) A flock of 100 young birds of 3 weeks of age, suffering from whitish diarrhea adhere surrounding feather of the vent and synovitis of hock joints.
  - (ii) A flock of 500 birds at the age of 25 days, suffering from loss of weight, decreased weight gain, chronic respiratory distress influenced by humid weather and wet season.

**MS in Medicine**  
**Dept of Medicine and Surgery**  
Sub: Production Diseases of Dairy Cattle (PDD-601)  
Jan-June Semester/2014,  
Semester Final Examination  
Full Marks: 40    Time: 2 hour

Figures in the right margin indicate full marks answer any four questions.

1. (a) What is Production disease of dairy cattle? How do you differentiate it from metabolic diseases? 3  
(b) What is Compton metabolic profile test for control of metabolic diseases in dairy cattle cited them 2  
(c) What is follicular cyst? How do you differentiate cystic ovary from follicular cyst in bovine? 5
2. (a) What is ketosis? Mention the volatile fatty acid (VFA) produced in CHO digestion. 3  
(b) What is anti-ketogenic VFA and why? 1  
(c) Briefly describe the clinical findings of ketosis in dairy cattle. Provide the line of treatment. 6
3. (a) What is gestation? Mention the common causes of termination of gestation in dairy cattle. 4  
(b) What is Parturition? Briefly describe the normal parturition of bovine along with function of relevant hormones. 4  
(c) Mention the age of puberty of the following: Jersey, Holstein, Shahiwal & RCC. 2
4. (a) Enumerate the cow level and farm level risk factors for development of "Bovine Mastitis" 2  
(b) What is udder or mammary gland? When and how udder cell become active for milk secretion? 3  
(c) Classify mastitis. Write-down the line of treatment of an acute mastitis. 5  
Why dairy animal culled from farm.
5. (a) Mention an afebrile, circulatory failure metabolic disease of dairy cattle. Write-down the etiology, clinical manifestation of it. 2  
(b) Mention 5 recumbancy diseases of dairy cattle. How do you differentiate milk fever from downers cow syndrome? 5  
(c) Provide the prevention & line of treatment of parturition paresis. 3

**Chittagong Veterinary and Animal Sciences University**  
**Faculty of Veterinary Medicine**  
**Department of Medicine and Surgery**  
**M. S. in Surgery, Semester: January-June, 2014**  
**Subject: Orthopaedic Surgery**  
**Course Code: ORS 601; Credit: 2**  
**Total Marks: 40**  
**Time: 2 (Two) Hours**

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

1. a) Write down the mechanism of bone healing of diaphyseal fracture in a dog. 7.0  
How will you evaluate a contact and gap healing. Mention the complete diaphyseal fracture bone healing time of dog, cat, calf, goat and birds.  
b) Write down the factors associated with bone healing. 3.0
2. Write down the detail orthopaedic examination of a dog. 10.0
3. a) How will you diagnose a dog suffering from patellar luxation and differentiate the different grade of patellar luxation? 4.0  
b) Write down the different techniques for correction of patellar luxation in a dog. 6.0
4. a) What is hip dysplasia? Write down the predisposing factors of hip dysplasia. 4.0  
b) What are the possible treatments of hip dysplasia in a dog? 6.0
5. a) A 3 months old calf suffering from the hip luxation, how will you diagnose the different kinds of hip luxation? 4.0  
b) Write down the different techniques applied for correction of hip luxation. 6.0
6. a) Write down in brief the conventional or external coaptation and internal techniques for fracture management in a dog. 6.0  
b) A 2 months old calf approximate body wt 30 kgs suffering from mid diaphyseal femur transverse fracture, how will you manage the case? 4.0

**M.S. in Surgery; January-June Semester-2014**

**Subject: Large Animal Surgery**

Course code: LAS 601

**Total Marks: 40**

**Time: 2 (two) hours**

Department of Medicine and Surgery; Faculty of Veterinary Medicine

Chittagong Veterinary and Animal Sciences University

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

1. (a) Define veterinary surgery. What are the principles of large animal surgery? 05  
(b) How will you examine a ruminant surgical patient before surgery? 05
2. (a) What are the common surgical affections in gastro-intestinal system? How will you correct a left displaced abomasum in a cow? 05  
(b) Mention the indications for enucleation of eyeball in large animals? How will you suture a lacerated wound of the eyelid in a cattle? 05
3. (a) What are the symptoms for caecal dilation in cattle? How will you diagnose this case in a veterinary hospital? 05  
(b) How will you perform caecotomy in cattle? Mention the post-operative management of caecotomy of cattle in field condition. 05
4. (a) What are the causes and treatment for upward patellar fixation in horse? 05  
(b) What are the indications for using bandage cast? Mention the benefits to use splints with cast materials. 05
5. (a) What are the indications of castration in horse? How will you castrate a male horse in open method of surgery? 05  
(b) Mention at least five congenital defects found in large animals. How will you treat a calf exhibiting with atresia ani in hospital? 05
6. Write short note on (*any two*): 5x2=10  
(a) Entropion in a horse (b) Mastectomy in a cow (c) Green stick fracture of tarsal bone in a goat (d) Herniorrhaphy in a calf.

**M.S. in Surgery; January-June Semester-2014**

**Subject: Zoo, Wild and Lab. Animal Anaesthesia**

Course code: ZWL 601

**Total Marks: 40**

**Time: 2 (two) hours**

Department of Medicine and Surgery; Faculty of Veterinary Medicine

Chittagong Veterinary and Animal Sciences University

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

1. (a) Why is anaesthesia needed in zoo, wild and laboratory animals? Mention the classification of anaesthesia in animals. 05  
(b) Mention the name of at least ten common anesthetics used for zoo, wild and lab. animal practices? 05
2. (a) When is fluid therapy indicated? 02  
(b) What pre-existing disease processes or conditions typically associated electrolyte abnormalities in zoo, wild and lab animals? 05  
(b) What fluids should be administered to patients with sodium abnormalities and how fast can be administered in primates of wild animals? 03
3. (a) Why are  $\alpha_2$ -agonists used so commonly in large animals? 02  
(b) Why are they considered a risk in small animals by some anesthesiologists? 04  
(c) When will an animal be sufficiently sedated following premedication administration to allow induction to proceed smoothly? 04
4. (a) Write down the pre-anaesthetic assessment and stabilization in a rabbit before anaesthesia? 05  
(b) What are the doses and routes of administration of Acepromazine, Diazepam, Ketamine, Medetomidine and Xylazine for sedation in rabbit? 05
5. (a) What sedatives are available for use in ruminants? 03  
(b) What are the advantages and disadvantages of ketamine? 03  
(c) What are the injectable anesthetic drugs available for maintenance of anesthesia? 04
6. (a) What are the signs of local anesthetic toxicity? 02  
(b) How can the depth of anesthesia be assessed in rodents and rabbits? 04  
(c) Describe different techniques to safely anesthetize neonatal mice and rats. 04



**Chittagong Veterinary and Animal Sciences University**  
**Faculty of Veterinary Medicine**  
**Department of Medicine and Surgery**  
**M. S. in Surgery, Semester: January-June, 2014**  
**Subject: Large Animal Anaesthesiology**  
**Course Code: LAA 601; Credit: 2**  
**Total Marks: 40**  
**Time: 2 (Two) Hours**

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

1. a) What are the points you should consider before general anaesthesia of a cattle? 7.0  
b) In case of large animal anaesthesia, what kinds of anaesthesia you should consider and why. 3.0
2. Write down in brief with indications of the different nerve block and regional anaesthesia of a cow. 10.0
3. a) Write down the advantages and disadvantages of inhalation anaesthesia. Recently what are the agents used for the large animal anaesthesia? Mention the different kinds of gaseous anaesthesia. 5.0  
b) What is MAC, minute volume and tidal volume? How will you calculate the oxygen volume in a 40 kgs calf during gaseous anaesthesia. 5.0
4. a) Write down the possible postanesthetic complications in large animals of general anaesthesia. How will you try to prevent such complications? 6.0  
b) Write down the ventilation techniques in large animals. 4.0
5. a) Mention the common anaesthetics used in cattle with dose and duration of action. Write down the anaesthetic effects in different system of two common sedative. 6.0  
b) Do you feel muscle relaxants are necessary for surgery? Write down the important purposes of muscle relaxants. Is require any precautionary measures for during use of muscle relaxants in surgery? 4.0
6. a) Write down in brief the anaesthetic procedure of following conditions- gid disease in a goat, umbilical hernia in a calf, penis amputation in a bull, enucleation of eyeball in a cow, dystocia in a goat, limb amputation in a calf, colic operation in a horse, udder amputation in a goat. 8.0  
b) A 2 months old calf approximate body wt 30 kgs suffering from mid diaphyseal transverse fracture, how will you manage the case. 2.0

**Chittagong Veterinary and Animal Sciences University**

**MS in Biochemistry**

January-June Semester' 2014

Department of Physiology, Biochemistry and Pharmacology

Faculty of Veterinary Medicine

**Course Title: Principles of Biochemical Techniques**

**Course Credit: BPT-601**

Time: 2 hours

Figure in the right margin indicate full marks. Answer any **8 (eight)** of the following questions.

1. What is Chromatography? Classify the Chromatographic methods. Distinguish between Size-exclusion chromatography and Affinity chromatography. 1+2+2=5
2. What is centrifugation? If you want to isolate ribosomes from a liver sample what type of centrifugation technique would you follow? Describe this centrifugation technique. 1+1+3=5
3. Define electrophoresis. Write down the principle of different types of electrophoresis. 1+4=5
4. Define Photometry, Fluorimetry, Flame Photometry and Optical Density (OD). State the principle of Beer-Lambert Law. 2+3=5
5. a. Explain the following terms: Analyte, Chromatogram, Eluate, and Mobile phase. 0.5×4=2  
b. Discuss the applications of Gas-Liquid Chromatography. 3
6. Draw a flow diagram of a HPLC and discuss the functions of paper chromatography. 5
7. What is Mass Spectroscopy? Write short notes on any two of the following: (i) GC-MS (ii) MALDI and (iii) Molecular ion. 1+2×2=5
8. Define the following terms: (a) Gene manipulation (b) Gene cloning (c) Genetic engineering (d) rDNA Technology, and (e) Biotechnology 5×1=5
9. What is cDNA? Describe the process of cDNA formation. 1+4=5
10. Define DNA sequence. Distinguish between Sanger and "Maxim and Gilbert" DNA sequencing methods. 1+4=5

**Chittagong Veterinary and Animal Sciences University**

**MS in Biochemistry**

January-June Semester' 2014

Department of Physiology, Biochemistry and Pharmacology

Faculty of Veterinary Medicine

**Course Title: Biochemistry of Natural Products**

**Course Credit: BNP-601**

Time: 2 hours

Figure in the right margin indicate full marks. Answer any **8 (eight)** of the following questions.

1. Define Vitamins. Classify vitamins. Vitamin D is a hormone but not a vitamin-Justify. 1+1+3=5
2. Distinguish between hormone and enzyme. Differentiate between various types of hormone action. 1+4=5
3. How do you distinguish between mineralocorticoids and adrenocorticoids. Describe the biosynthesis of adrenocorticoids. 2+3=5
4. a. Write down the structure of the following vitamins: (i) Niacin; (ii) Pyridoxine 2  
b. Write down the biochemical functions of following vitamin like compounds: 3  
(a) Choline (b) Inositol (c) Lipoic acid
5. Describe the possible mechanism of antimicrobial resistances. 5
6. What do you mean by base peak? What do you know about  $M^+$  and  $M^{+}$  Ion? How will you distinguish three isomeric butanols on the basis of mass spectroscopy? 1+2+2=5
7. Write a brief note on the following: a. Metastable Ions (b) McLafferty Rearrangement 2.5×2=5
8. What is NMR spectroscopy? Write down the applications of NMR spectroscopy. 1+4=5
9. Enumerate the important features in NMR spectroscopy. Describe any three of those. 2+3=5
10. What is chemical shift? Describe the factors influencing chemical shift. 1+4=5

**Chittagong Veterinary and Animal Sciences University**  
**MS in Biochemistry**  
January-June Semester' 2014  
Department of Physiology, Biochemistry and Pharmacology  
Faculty of Veterinary Medicine  
**Course Title: Intermediary Metabolism and Its Regulation**  
**Course Credit: IMR-601**  
Time: 2 hours

Figure in the right margin indicate full marks. Answer any **8 (eight)** of the following questions.

1. What is catecholamine? Describe the biosynthesis of catecholamine. 1+4=5
2. What is the precursor of serotonin? Write down the functions of serotonin and melatonin. 1+2+2=5
3. What is gout? Which enzyme is responsible for formation of uric acid from purines? Describe the process of purine catabolism. 1+1+3=5
4. What is simple lipid? How does simple lipid produced in living system? 1+4=5
5. Imbalance in the rate of triacylglycerol formation and export causes fatty liver syndrome. Explain. 5
6. Differentiate between Glycolysis and Fermentation. Excessive ingestion of fermented products is harmful for the living body. Explain. 2+3=5
7. What is gluconeogenesis? Tricarboxylic Acid Cycle is amphibolic in nature –Justify. 1+4=5
8. What are phospholipids? State the biosynthesis of gangliosides. 1+4=5
9. Define HMP Shunt pathway. Write down the significance of this pathway. 1+4=5
10. Ruminant can synthesis vitamin C but primate cannot do so. Why? How does milk sugar produce in mammary glands? 1+4=5

January-June MS in Pharmacology Final Examination-2014  
Department of Physiology, Biochemistry and Pharmacology  
Faculty of Veterinary Medicine  
Chittagong Veterinary and Animal Sciences University  
Course Title: General Toxicology; Course code: GTL-601  
Total Marks: 40; Time: 2.00 hours



Answer any Four (4) questions from the followings:

- Q1. a. Define Toxicology. Differentiate toxin from poison.  
b. Classify toxicant based on toxicity potential and target organ with examples.
- Q2. a. Define and classify antidote with examples. Write down the antidote of Iron and OP.  
b. Briefly describe the diagnosis of Nitrate and lead poisoning in cows.
- Q3. a. What is alkali disease? How will you diagnose and treat it?  
b. Briefly describe the general treatment of a poisoning case.
- Q4. a. Describe the factors that influencing the toxicity of a toxicant.  
b. Write down the treatment of arsenic and lead poisoning in livestock.
- Q5. a. Write down the diagnosis and treatment of sodium chloride poisoning in cattle.  
b. What are the factors involve in Nitrate poisoning. How will you treat it in case of a goat?

January-June MS in Pharmacology Final Examination-2014  
Department of Physiology, Biochemistry and Pharmacology  
Faculty of Veterinary Medicine  
Chittagong Veterinary and Animal Sciences University  
Course Title: General Pharmacology; Course code: GPH-601  
Total Marks: 40; Time: 2.00 hours

Answer any Four (4) questions from the followings:

- Q1. a. Differentiate drugs from medicine. Classify drugs based on sources and therapeutic uses. 6.0  
b. Briefly describe the branches of pharmacology. 4.0
- Q2. a. Define Pharmacokinetics. Write down the factors that involved with drug metabolism. 5.0  
b. Define Bioavailability, Biological half life and Drug incompatibility. 5.0
- Q3. a. Write down the sources of drugs with active principal. 5.0  
b. Briefly describe the different parts of a good prescription. 5.0
- Q4. a. Differentiate therapy from chemotherapy. Write down the principals of therapy. 6.0  
b. Briefly describe the uses of clinical pharmacology in veterinary practice. 4.0
- Q5. a. Differentiate lotion from liniments. Write down the possible methods of drug administration with examples. 7.0  
b. Briefly describe the drugs dosages forms. 3.0

**MS in Pharmacology January-June Semester Final Examination 2014**

**Chittagong Veterinary and Animal Sciences University**

**Department of Physiology, Biochemistry and Pharmacology**

**Course name: Phytotoxicology**

**Course Code: PTL-601**

**Total Marks: 40      Time: 2 hours**

**Answer the following question (any four):**

1. (a) Define phytotoxicology, phytobiotics & Detoxification. How detoxification mechanism of plant grow in grazing animal. 5
- (b) Define common prevention of plant poisoning. 5
2. (a) Write common phytotoxin with their antidote (any 10) 5
- (b) Explain field diagnostic techniques for detection of plant poisoning in Bangladesh. 5
3. (a) Write down the cancer producing plant poisoning in large animals. How does plant produce cancer the animal body? 5
- (b) Write down the important plant toxins and antinutritional factors with their plant sources. 5
4. (a) Write down the family and poisonous principles of mushroom. Which mushroom species causes CNS signs? 5
- (b) Write down the chemical signs of Dhool Kalamy in goat and Tobacco in human. 5
5. Write short note (any five) 10
  - a) Marijuana
  - b) Walnut
  - c) Physical antidotes for plant poisoning
  - d) Occasional development of toxic substances plant.
  - e) Photodynamic substances of poisonous plants.
  - f) Decay of knowledge on poisonous plant