Chittagong veterinary and Animal Sciences University
Department of Medicine and Surgery, Faculty of Veterinary Medicine
MS in Medicine, January-June Semester-2017

Subject: Food Animal Medicine (FAM-601), Total marks: 40, Time-2 (two) hours

*(Figure in the right margin indicates full marks. Answer any **FOUR** questions)*

1. a) Define and classify bovine mastitis. How do you differentiate contagious from environmental mastitis? 03
   b) List 5 important parasitic diseases of food animal with their diagnosis and treatment protocol. 05
   c) What are the immediate concerns for healthy population during anthrax outbreak in a particular area? 02

2. a) List 5 important protozoaldiseases of cattle available in Bangladesh. 02
   b) Write down the etiology, epidemiology, diagnosis and line of treatment of brucellosis in cattle. 05
   c) Write down the common treatment procedures of contagious ecthyma and cowpox. 03
   a) Mention 5 important zoonotic diseases with their causal agent that naturally transmitted between man and animal. 03
   b) Write down the common clinical findings of 3 viral diseases that affect the lymphatic system of food animals. 03
   c) Briefly describe the clinical findings, diagnosis and treatment of HS in buffaloes of coastal areas in Bangladesh. 04

3. a) Write down the important clinicopathological findings, which most likely point the diagnosis of following diseases. 05

   i) Tetanus ii) Trypanosomiasis, iii) Epimeral fever, iv) Anaplasmosis, v) Ascariasis
   b) Enumerate the biochemical test for the diagnosis of following diseases. 05
   i) Tuberculosis and ii) Brucellosis

4. Give the line of treatment of following diseases (any four). 4×2.5=10
   a) FMD
   b) Leptospirosis
   c) Dermatophytosis
   d) Schistosomiasis
   e) Babesiosis

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
MS in Medicine
Semester: January-June 2017
Subject- Avian Medicine
Course code: AVM-601
Total marks – 40
Time – 2 (Two) hours

(Figures in the right margin indicate full marks. Answer **FOUR** questions including number **1**)

1. (a) Describe the line of treatment of bacterial, viral and fungal diseases in poultry. **08**

   (b) Name eight diseases caused by *E. coli* in poultry. **02**

2. Write down the etiology, clinical signs, postmortem lesions, treatment, prevention and control of Duck plague. **10**

3. (a) Differentiate between Infectious bronchitis and Infectious laryngotracheitis. **05**

   (b) Write short notes on Fowl pox and Pullorum disease. **05**

4. Write down the etiology, clinical signs, postmortem lesions, treatment, prevention and control of Newcastle disease. **10**

5. Write down the etiology, clinical signs, postmortem lesions, treatment and prevention of various Mycoplasmosis in chickens. **10**

6. Describe Coccidiosis in chickens and Chlamydiosis in pigeons. **10**

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
MS in Theriogenology Final examination-2016
Semester-July-December
Course title: Reproductive Health Management of Farm Animals (Theory)
Course Code: RMF-602, Credit: 2
Total marks: 40, Time: 2 hour

(Answer any five questions which have equal marks eight)

1) Describe briefly about Reproductive health management. Write down the effect of nutrition on reproduction in dairy cattle.

2) How will you evaluate the economics of herd health program profitability by using partial budgeting?

3) Describe briefly about the reproductive management of small dairy farm.

4) Write down the common vaccination schedule for maximum bovine fertility.

5) How will you analysis reproductive records using DHIA summaries for different reproductive parameters?

6) Write down about heifer development program for replacement of dairy herd.

7) Write short notes on any two of the following:
   (a) Designing a bio-security program for a small dairy farm.
   (b) How will manage irregular estrous and anestrous?
   (c) Rational use of antimicrobial drug on reproduction.

Department of Medicine and Surgery

MS January –June Semester Final Examination, 2017

Course Title and Code: Research Methodology (REM-601: 2+0)

Total marks: 40

Time: 10:00 A.M; **Date**: 25.05.17

[Answer all questions. Figures in the right margin indicate full marks]

Q1. Controlling highly pathogenic avian influenza (HPAI) in poultry sector in Bangladesh is challenging. Different approaches were attempted to prevent and control HPAI: i) culling birds, ii) improvement of bio-security standard and iii) vaccination, but the problem still exists. There were recent HPAI outbreaks in commercial layer farms in Cox's Bazar district during winter in 2017 where 60-70 farmers were affected. Some suspected HPAI human cases were also noticed in and around the outbreak affected farms. Therefore, the Department of Livestock Services and the Department of Public Health, Chittagong Division in collaboration with CVASU Epidemiology unit is urgently formed a team to investigate the recent HAPI outbreak and follow up investigation.

(a.) Under the above circumstance what kind of epidemiological study do you think the team should design and conduct both for poultry and human? And why? Write down the advantages and disadvantages of your chosen study. How do you address different limitations (biases) of your preferred study? **15.0**

Q.2 (a.) Write two epidemiological study of prospective nature and how you will differentiate them from each other. **5.0**

(b.) Where do you set a nested case-control study? What are the benefits of conducting this study? **5.0**

Q.3 (a.) How do you distinguish case report and case series from other epidemiological studies? **7.0**

(b.) Describe the following terminology briefly: **8.0**

i) Reference population;
ii) Source population;
iii) Sampling unit/Epidemiological unit and sampling frame and
iv) Study population

Chittagong Veterinary and Animal Sciences University
Department of Medicine and Surgery
MS January –June Semester Final Examination, 2017
Course Title and Code: *Principles of Epidemiology (PRE-601: 2+0)*
Total marks: 40
Time: 10:00 A.M; **Date**: 22.05.17

[Answer all questions. Figures in the right margin indicate full marks]

Q1. As an epidemiologist you are assigned to conduct a study to assess the status of Brucellosis in commercial dairy cattle in Chittagong district (N=400) with the aim of determining a suitable control programme to reduce the actual burden of bovine brucellosis and stopping the potential human transmission. ***The study has found 100 Brucella sero-positive cattle herds and 30 Brucella cattle herds. A total of 5 herds have experienced mortality.***

a. Calculate and interpret appropriate measures of disease frequency according to the given statistics above. **4.0**

b. What kind of data you require to display different distribution of sero-prevalence of Brucellosis in cattle herds in Chittagong district. What important message you do expect to have from the distribution to suggest brucellosis control. **6.0**

Q2 **a.** Which measure of disease frequency accounts censor data and why? How do you differentiate different measures of disease frequency from each other? How does disease incidence influence on disease prevalence? **5.0**

b. **5.0**

Class of cattle	FMD +	FMD-	Total
Calf	20		100
Young	50		150
Adult	60		150
Total	**130**		**400**

i. Fill up the cells in the above table with correct figures and calculate and interpret different measures of effect and impact.

ii. Which class of cattle you have considered baseline to answer the ***question I*** and why?

Q3 **a.** How do you rule out and rule in the presence of confounding and interaction variables using the equation between a primary factor and a response variable? Draw a sketch and explain it. **5.0**

b. Write down different assumptions to calculate the following estimates (i and ii) and interpret the findings of ii. **5.0**

i) Basic case reproduction number (R0)
ii) Net case reproduction number (R)
iii) R_0=1.8 for Rabies and R=10 for FMD

Q4 **a.** Draw a causal diagram of clinical PPR in goats or parvo in dogs or rabies in dogs. **5.0**

b. Write the importance of Hill's criteria in disease causation? **5.0**

M.S. in Surgery; January-June Semester-2017
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) How will you classify injectable anaesthetics used in zoo animal practice? 03
   (b) Mention at least three parameters monitored for respiratory, cardiovascular and cardiovascular systems during general anaesthesia in wild and zoo animals? 04
   (c) Briefly mention the maintenance of airway during anaesthesia of zoo, wild or laboratory animals. 03

2. (a) How will you diagnose dehydration in zoo animals? 02
   (b) Describe the conditions of the zoo patients whether the fluid therapy is contraindicated or indicated under special supervision. 04
   (c) What are the common routes for fluid administration in zoo, wild and lab animals? 04

3. (a) What are the principles of pain management in animals? Why it's important for all species of animals. 03
   (b) Write down the capture and restraint techniques fordifferent species of mammals? 04
   (c) Write down the objectives of CPCR in wild animals. Mention about the six steps of CPCR adapted from the human resuscitation council guidelines. 03

4. (a) What are the methods for tranquilization or premedication in felids? 04
   (b) Briefly describe the different types of dart used in zoo animal practices. 03
   (c) Describethe mechanism of drug delivery in blow darts? 03

5. (a) What are the emergencies during anaesthesia in birds? 03
   (b) Mention the name and dosage of three recommended drugs for immobilization of wild animals? 03
   (c) Briefly describe the care and emergencies for protection of capture myopathy in wild animals. 04

2x5=10

6. Write short notes on ***any two*** of the followings-
   a) Inhalation anaesthesia in rodents
   b) Immobilization of free ranging animals
   c) Premedicative agents for elephant.
   d) Intravenous catheterization in Birds

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
M. S. in Surgery, Semester: January-June, 2017
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 of the followings)

1. Write down the important properties of following local analgesics with their onset of action, duration and dose- cocaine, lidocaine, bupivacaine and proparacaine, Mention the mode of action of local anaesthetic. 10.0

2. Write down in brief with indications and techniques of the different nerve blocks and regional anaesthesia of a cow and horse. 10.0

3. Mention different parts of inhalation anaesthetic machine and ET with intubation technique. Why inhalation anaesthesia is more advantages than injectable anaesthesia. Describe the important features of isoflurane and sevoflurane anaeshesia. 10.0

4. Describe the recording information during anaesthesia. What are the indications of muscle relaxant in large animals? Classify muscle relaxants with mode of actions. 10.0

5. Mention the possible postanaesthetic complications in large animals. Write down the prevention and treatment of such complications? Write down the ventilation techniques in large animals. 10.0

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery
M. S. in Surgery, Semester: January-June, 2017
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 dog suffering from lameness both forelimb and hindlimb. Write down the detail orthopaedic examination procedure in dog.	10.0
2.	Write down in brief the conventional or external coaptation and internal techniques for fracture management in a dog and cat.	10.0
3.	How will you differentiate a dog suffering from hip dysplasia and hip dislocation? Write down the surgical and nonsurgical technique for correction of both conditions.	10.0
4.	Write down breed predisposition/incidence of patellar luxation in dog and cat. How will you diagnose a dog suffering from patellar luxation? Describe the different surgical techniques for correction of patellar luxation.	10,0
5.	Write down the bone grafting technique with their indications. What kinds of bones are usually used for collection of bone graft? Write down the correction techniques of mandibular fracture.	10.0
6.	Write short note on following conditions- Legg-Perthes disease, panosteitis, arthrodesis, osteochondrits dissecans(OCD)	10.0

M.S. in Surgery; January-June Semester-2017
Subject: **Large Animal Surgery (Theory)**
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) What do you mean by wound healing? 02
   (b) Briefly describe the different stages of wound healing in large animal surgery. 04
   (c) What are the common factors that affect wound healing process in animal? 04

2. (a) What are the common surgical affections of gastro-intestinal system? How will you treat a cow suffering from frothy bloat? 05
   (b) Explain the common methods for destruction of gangrenous mastitis in a cow. 03
   (c) What are the possible complications of castration in horse? 02

3. (a) Write down the etiology, clinical signs, diagnosis and treatment for atresia ani in large animal. 04
   (b) Enlist the possible surgical affections of intestine in large animal. Describe the various techniques of intestinal anastomosis used in veterinary surgery. 04
   (c) How will you treat a sinus created from the faulty injection in the thigh of a bullock? 02

4. (a) Write down the mechanism of occurrence traumatic reticulo-pericarditis in cattle? 04
   (b) What are the common sites for coeliotomy? What are the merits and demerits of choicefor midline incision in large animal during laparotomy? 03
   (c) How will you treat a teat laceration in a Holstein Friesian cow? 03

5. (a) Classify the incomplete fracture. Describe the management of metacarpal fracture in a dairy cow. 04
   (b) What are the advantages of cesarean operation performed in the left paralumbar fossa compared to the right side? 03
   (c) Differentiate between Rumenotomy andRumenostomy with mentioning their indications. 03

6. Write short notes on ***any two*** of the followings- 2x5=10

   (a) Techniques for Teaser bull preparation
   (b) Upward fixation of patella in cattle
   (c) Merits and demerits of dehorning and disbudding
   (d) Septic arthritis in large animal

Chittagong Veterinary and Animal Sciences University
MS in Medicine Semester Final Examination- 2017
Course Title: Zoonotic Medicine (Theory)
Course Code: ZOM-601
Department of Medicine & Surgery
Time: 2 Hours; Full Marks: 40

Answers any eight (08) questions (5 marks in each question)

1. Evaluate the diagnosis techniques for rabies.
2. What do you mean by "Mycobacteium tuberculosis complex"? "Tuberculosis is a most devastating infectious disease worldwide" to what extent you may agree or disagree.
3. Evaluate the current status of zoonotic tuberculosis in Bangladesh.
4. What is bioterrorism? Make your decision, whether you support bioterrorism or not.
5. Illustrate the role of anthrax lethal and edema toxins in anthrax pathogenesis.
6. Propose the general strategies for controlling any zoonotic diseases.
7. Highlights the interim guidance: testing algorithm for pregnant women with history of travel to an area with Zika virus transmission, with/without clinical symptoms.
8. Decide your position on "zika virus infection and microcephaly in neonate".
9. Focus on the chronology of outbreaks due to Nipah virus in Bangladesh. Plan the interventions that could adopt to prevent Nipah virus infection in human.
10. Describe the natural reservoir and transmission of Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

January to June Semester, 2017 Final Examination
Department of Medicine & Surgery

MS in Medicine

Chittagong Veterinary and Animal Sciences University
Course Title: Biostatistics
Course Title: BST-601
Full Marks: 40 Time: 2 hours

Answer any 4 from the following questions. Values are shown in the right margin in each question.

1. a) Compare between regression and correlation. Define Rank correlation with an example. 5

   b) The marks of 5 students (out of 7.5) in Medicine and Biostatistics are: 5

M	6	6.5	5.8	4	7
B	7.5	7	7.2	3.5	6.5

   Compute Rank Correlation and comment.

2. a) Define treatment and block with an example each. 4

   b) Different kinds of hormone were applied to different blocks of chickens. Are the treatment and block statistically significant?(use 5% level of significance) 6

Block/Treatment	1	2	3
1	1.5	1.3	1.5
2	1.4	1.8	1.6
3	1.35	1.55	1.12
4	1.7	1.1	1.71

3. a) Define Chi square. Derive the formula to test a population mean with a specific value in case of small samples. 5

   b) Given a sample of 50 cows with an arithmetic mean for lactation milk yield of 3600 kg. Does this herd is greater than a population with a mean of 3500 kg and standard deviation of 700 kg? (Use 5% level of significance). 5

4. a) Define Normal test. Write some of it's uses. 4

   b) A medicine company claims that there is no relationship between beef consumption and suffering from Heart disease of the employees of a farm. A random sample of 250 employees was taken for the study. Here is the data: 6

	Found Disease	No Disease
Consumer	50	100
Non consumer	25	75

   From the above data can it be concluded that having beef leads to suffering from heart disease? Use 5% level of significance.

5. a) What are the basis principles of experimental design/ Explain 4

   b) Define RBD with a practical example in your field and identify treatment, block, experimental unit and yield in that example. Compare between CRD and RBD. 6

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
Department of Medicine and Surgery (DMS)
January-June Semester Final Examination 2017
Sub: Veterinary Dermatology; Course Code: VED-601
Full Marks: 40; Time 2 hours
Answer any four (4) from the following questions

1	a	What do you mean by canine hypothyroidism?	1
	b	Classify canine hypothyroidism with causes	2
	c	Describe briefly clinical presentation, cutaneous manifestation, diagnosis and treatment of canine hypothyroidism	7
2	a	What are the risk factors associated with nutritional dermatoses in cats	2
	b	What are the cutaneaous signs of unbalanced diets in cats	1
	c	Tabulate differential diagnosis of cutaneous reaction patterns associated with adverse food reactions	3
	d	Describe essential fatty acids and vitamin E deficiencies in cats	4
3	a	Define: Keratosis, Eczema, Vesicle	3
	b	What are the principles of treatment of skin diseases	3
	c	Describe Etiology, pathogenesis, clinical findings and treatment of photosensitization in cattle	4
4	a	Describe epidemiology and clinical signs of dematophytosis in dogs	4
	b	Write down the clinical signs, diagnosis and treatment of malassezia dermatitis	6
5	a	Write down the management allergic skin diseases in dogs	5
	b	How will you treat defects in cornification of canine skin.	5

Good Luck

MS in Dairy Science Semester Final Examination
January to June Semester 2017
Sub: Dairy Nutrition (DNT- 601)
Full Marks: 40; Time: 2 Hours

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

1. a) Explain bypass protein, inert fat and bypass anthalmentics? 4
   b) Discuss the importance with example of bypass protein in high yielding dairy cows. 6

2. a) What is fermentation? Discuss primary & secondary fermentation in ruminant. 4
   b) Briefly discuss the modern techniques available to maintain our dairy cattle. 6

3. a) What is ration? Discuss briefly about area specific mineral mixture. 4
   b) Formulate a daily ration chart for a dairy cow using available feed ingredients which having body weight 300 kg offering milk 15 litres per day. 6

4. a) Discuss how the composition of milk varied upon the offered feed. 4
   b) What is feeding standard? Discuss the feeding standard for growth of a cattle. 6

5. a) Briefly discuss the possible ways of feeding urea to a ruminant. 4
   b) What do you mean by digestibility? Briefly discuss the factors that affect digestibility of a feed. 6

6. Write short notes (any 4) on: 4x2.5 = 10

   a) Apparent vs true digestibility,
   b) UDP vs RDP,
   c) Calf feeding,
   d) Proximate analysis scheme,
   e) Evaluation of feed quality,
   f) Feed additives

Chittagong Veterinary and Animal Sciences University

M S in Poultry Science

January-June Semester Final Examination 2017

Course title: Poultry Breeding

Course Code: PBR-601

Total marks: 40

Time: 1 hour

Answer any 2 (Two) question from the followings. Values are shown in the right margin in each question.

1. a) What is poultry breeding? Write down the objective of poultry breeding for poultry improvement with example. **5.0**
   b) Wright in brief about the polyphyletic and monophyletic theory for the development of modern chicken. **5.0**
   c) What are the assessment criteria of birds for the development of meat type chicken. **10.0**

2. a) For selecting a birds for egg purpose discuss the basic points with example. **8.0**
   b) What is selection index? Calculate the Osborne index with the following information Egg production of 60 wks age on pullet is given below. These pullets are the offspring of 4 sires mated to two dams each and having 3 progeny from a single hatch. **12.0**

Sire	Dam	Progeny Egg production		
		1	2	3
1	1	249	239	237
	2	243	241	234
2	1	243	260	234
	2	265	251	245
3	1	241	244	271
	2	255	253	255
4	1	240	243	254
	2	256	242	188

The flock average is 250 eggs and heritability of e production is 0.30. Calculate Osborne index value of each bird for selecting the top ranking females. Draw your valid conclusion, (b_1=1.143 and b_2= 1.524).

Or,

Develop a multitrait selection index (SI) for the objective of meat production in order to select best top chicken.

3. a). Distinguish between general combining ability and specific combining ability . **5.0**
   b) Write in detail how you will develop a commercial layer. **10.0**
   c) Explain the term reciprocal recurrent selection and effective population size. **5.0**

Chittagong Veterinary and Animal Sciences University (CVASU)

Department of Dairy and Poultry Science

MS in Poultry Science

Final Exam 2017

First Semester (Jan to Jun)

Course Title: Marketing of Poultry and Poultry Products

Course Code: MPP-601

Total Marks: 40, Time: 2.00 Hours

Instructions:

1. *Answers should be **specific** and **brief**.*
2. *All parts of a single question need to be answered without breaking the sequence.*

Mandatory Part (Marks: 10)

Answering to these questions is mandatory

1. Discuss the history of Poultry Industry in Bangladesh.	5
2. Discuss Vertical Integration. Criticize whether vertical integration can be implemented in Bangladesh.	5

Selective Part (Marks: 30)

Please answer to any 3 (three) from the below questions:

1. A. Name the Poultry Products available in Bangladesh. Show the importance of Poultry Products. B. Show the reasons for the increase of the demand of the Poultry Products. C. "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.	3 2 5
2. A. Identify 4 Pillars of Marketing Concept. B. Does Marketing add value? Justify your answer. C. Show how Macro Environment impacts a Poultry Farm?	2 3 5
3. Suppose you are working for Marketing of CP "Ready to Cook" food. A. Propose some ideas on how to increase the Value of your product. B. Develop a chain to distribute your product to the consumers.	5 5
4. A. Demonstrate a typical Marketing System of the Poultry industry. B. Hypothetically select ONE company or organization or institution. Show the 7 Ps of that company or organization or institution. C. Propose your recommendations for Future Policy Direction after discussing the challenges of the Poultry industry.	3 3 4
5. A. What are the market risks? B. Show the basic Risk Management Strategies? C. How do you calculate ROI? D. You have two Strategic Business Units (SBU). First year calculation says one is giving 25% ROI and another one is giving 15% ROI. Which one is better and why?	1 3 3 3

Chittagong Veterinary and Animal Sciences University
MS in Poultry Science Final Examination
January to June Semester 2017
Subject: Ducks and Specialized Fowl Production-Theory
Course Code: DSF-601
Total Marks: 40. Time: 02 hours

Answer any five of the following questions including 1; Figures in the right margin indicate the full marks

1. a). Discuss the prospect of rearing duck over chicken in Bangladesh — 3
   b). State the economic traits of commercial importance for selection of meat type duck — 3
   c). **Mention the dissimilarities of Muscovy duck in compared to Mallard duck** — 2

2. a). State the special characteristics of quail, guineafowl and pigeon farming — 4
   b). 'Quail farming is better than chicken farming'—justify this — 3
   c). **'Chinese fowl is a variety'** ----- explain — 1

3. a). Mention the strategy of lean meat and green meat production for healthy lifestyle — 2
   b). State the integrated farming system with example — 3
   c). Discuss the process for ejection of avian lactation — **3**

4. a). Give the composition of pigeon ration & calculate the feed requirement for rearing 10 pairs of breeder pigeon up to one year — 3
   b). State the hatching, incubation and feeding of squab — 2
   c). Discuss the breeding practices of Turkey — 3

5 a). Narrate the brooding and rearing management of duckling, gosling and keet — 4
   b). State the strategy for improving local or indigenous duck breed — 3
   c). **Mention the category of Turkey** — **1**

6. **Write short notes on any five of the following : (1.6 ×5)** — 8

a). Animal crop
b). Squab
c). Dovecote culture
d). Run
e). Worst mother
f). Watch dog
g). Pinioning
h). Mule duck
i). Crippling disease

Chittagong Veterinary and Animal Sciences University
Department of Physiology, Biochemistry and Pharmacology
MS in Pharmacology January-June Semester Final Examination-2016
Course Title: General Toxicology
Course Code: GTL-601
Total Marks: 40.0; **Time:** 2 hours

Figures in the right margin indicate full marks. Answer any ***Four (4)*** *questions from the followings:*

1. a) Define toxinology. Justify the implications of forensic and regulatory toxicology in medical science. 3.0
   b) Classify the toxicant on the basis of frequency and duration of exposure and toxicity potential. 3.0
   c) Write down the mechanisms of toxicity in relation to a toxicant. 4.0

2. a) Define residual poisoning. What is the metabolic fate of a toxin? 2.0
   b) What is LD_{50}? How LD_{50} used to evaluate the extent of toxicity of toxicant in the body? 3.0
   c) Explain the term "Universal antidote"? How will you build up a toxicological laboratory for maintaining proper diagnostic protocols? 5.0

3. a) List the factors that influencing the toxicity of nitrate in cattle. What is the common mechanism of nitrate poisoning in cattle? 4.0
   b) Differentiate nitrate poisoning from other common toxicant which causes haemo-toxicity? 3.0
   c) What is Toxaemic Jaundice? How will you diagnose and manage the case? 3.0

4. a) Now-a-days, how human are exposed to lead poisoning? What are the symptoms you observed on that case? Write about the line of treatment of it. 5.0
   b) How will you diagnose chronic arsenic poisoning in human? Write down the clinical management of that case. 5.0

5. a) Define hazard. 1.0
   b) Write short note (any three): 9.0
      i) Blind staggers
      ii) Teart disease
      iii) Common salt poisoning
      iv) Physico-chemical properties of toxicant

January-June MS in Pharmacology Final Examination-2016
Department of Physiology, Biochemistry and Pharmacology
Faculty of Veterinary Medicine
Chittagong Veterinary and Animal Sciences University
Course Title: Chemotherapy; Course code: CHT-601
Total Marks: 40; Time: 2.00 hours

Answer any four (4) questions from the following:

Q1.	a. Write down the mechanism of action of potentiated sulfonamides and penicillin.	5.0
	b. What are the unwanted effects of sulfonamides and penicillin on host? Write down the precaution of them.	5.0
Q2.	a. Define fluroquinolones. Write down the mechanism of action and clinical application of ciprofloxacin.	5.0
	b. Write down the mechanism of action of tetracycline. Why tetracycline is contraindicated to production and early life of development.	5.0
Q3.	a. Write down the mechanism of action of Gentamycin and Streptomycin.	5.0
	b. Write down the clinical application of Griseofulvin, Amphotericin-B and Nystatin with doses.	5.0
Q4.	a. Write down the mechanism of action of Acyclovir and Gancyclovir.	5.0
	b. Write down the clinical application of Amantadine and Ribavirin with doses.	5.0
Q5.	Write short notes on (any four): 2.5x 4 a. Antiseptics and disinfectants b. Chloramphenicol c. Macrolides d. Enrofloxacin e. Cephalosporin f. Metronidazole	10

Chittagong Veterinary and Animal Sciences University

Department of Physiology, Biochemistry & Pharmacology

MS (Pharmacology)

Final Examination-2016

January – June Semester

Sub: Food Toxicology & Public health (FTP-601)

Total Marks: 40 Time: 2 hours

Answer the following questions (Any four):

1. a. Define Health, Hygiene & Public health. 3
   b. What do you mean by zoonoses & zoonotic disease? 2
   c. Make a list of at least ten zoonotic disease with their principal animal's involved, probable means of spread to humans & clinical manifestations in humans. 5
2. a. Differentiate food & feed. How food contamination occur generally. Identify the sources of food contamination and distinguish between them. 4
   b. Enumerate the sources of bacterial contaminations of pediatric milk & milk products. 3
   c. What causal organisms must act to cause spoilage of an undamaged shell egg? 3
3. a. Define & classify food borne disease and present them in a schematic manner. 4
   b. Outline briefly the epidemiological factors that influence the type of food-borne hazards. 3
   c. What do you mean by disease outbreak? Mention the major categories considered in developing an outbreak case definition. 3
4. a. Differentiate food security & food safety. Write down the food adulteration & public health issues in Bangladesh. 5
   b. What are the food safety basic laws? How fresh milk is usually adulterated & how artificial milk is being prepared? 5
5. **Short note : (any five)** 2 x 5 = 10

   (a) Melamine in Food; (b) Ready to eat foods; (c) Tobacco poisoning;

   (d) Antibiotic free low cholesterol egg; (e) Aquatic Biotoxins; f) HACCP

Chittagong Veterinary and Animal Sciences University

Department of Physiology, Biochemistry & Pharmacology

MS (Pharmacology)

Final Examination-2016

January – June Semester

Sub: Phytotoxicology (PTL-601)

Total Marks: 40 Time: 2 hours

Answer the following questions (Any four):

1.	a.	Define toxicology, phytotoxicology & zootoxicology? Why poison in plant?	3
	b.	What do you mean by toxic principles & what are the toxic principle of Dhutara, Karabi & Rali with their scientific name.	3
	c.	Describe common diagnosis & treatment protocol of plant poisoning.	4
2.	a.	What do you mean by toad stools? How many spp. of mashroom causes poisoning for human. Write their common name, genera, Spp. Family, Toxic constituents syndrome & treatment any five of them.	5
	b.	Make a list of poisonous plants which effects nervous system blood circulation & causes stonmatitis in small animals .	5
3.	a.	How marijuana. Hemp & hashish cause poisoning in human beings write down the poisonous principal, clinical signs, treatment & prevention of them.	5
	b.	Define cyanogenesis? Write down the sources, m/a, Pathogenesis, Lab diagnosis and treatment of cyanide poisoning.	5
4.	a.	List the estrogenic poisoning plants. Write down toxic constituent, m/a, clinical sign, diagnosis & treatment of estrogenic plant poisoning.	5
	b.	Define & classify photo sensitization. List of photosensitizing agents, toxic constituent, m/a clinical sign, diagnoses & treatments of photosensitization.	5
5.	a.	What do you mean by arsenicals, arsenides, arsenates, arsine a arsenates? Write down the physical & chemical properties sources of exposure, primary symptoms, diagnosis and treatment of arsenic poisoning in livestock.	5
	b.	How you differentiate Arsenic poisoning between human and animal health? How arsenic effect on the body enzymatic system?	5