

**Chittagong Veterinary and Animal Sciences University**

**MS in Microbiology, Finalexamination**

January-June Semester, 2017

Course Title: **Food Microbiology**

Course code: **FMB-601**

Total Marks: **40**, Time: **02 Hours**

Answer any **four** questions. The figures in the right margin indicate full marks.

01. a) What is food microbiology? Prepare a time line of invention of different forms of milk for preservation. 01+02
- b) Select the acts on food legislation that are prevailed in our country. 02
- c) What is Poising Capacity? Explain the effect of  $E_h$  and  $a_w$  on growth of microorganisms in food. 01+04
02. a) Define the following terms: 02  
QA, QC, Gy, Vacreation.
- b) Illustrate the diagram of a spray drier and a drum dryer. 02
- c) Differentiate the following terms: 02x03
- i. Grade A raw milk for pasteurization and Grade A pasteurized milk.
- ii. Margarine and Butter
- iii. Drip and Leakage
03. a) There are some D values of a specific bacterial population. Compute its Z value with justification. 02
- | Temperatures ( $^{\circ}$ C) | Time (minutes) |
|------------------------------|----------------|
| 47                           | 65             |
| 50                           | 6.5            |
| 53                           | 0.65           |
- b) Sketch the preservation procedure for green peas that will make them available in off-season. 03
- c) Design a SOP on organoleptic test for inspecting a fish market. 03
- d) If the number of lactics decreases in milk, what type of change will occurs? 02
04. a) What is food borne disease? Make a list of food borne diseases caused by different types of microorganisms with their incubation period, duration of illness, clinical signs and source. 01+04
- b) Define food borne disease outbreak. Design a guideline for investigating an outbreak of Botulism. 01+04
05. a) What is Food Control? Prepare a list of food control Ministries and Agencies/Departments of Bangladesh. 01+03
- b) Write short notes on: 03x02
- i. Staphylococcal food poisoning
- ii. HACCP

**Chittagong Veterinary and Animal Sciences University**

**MS In Microbiology**

**January-June Semester, 2017**

**Advanced General Virology**

**Course code: AGV-601**

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

**(Figures in the right margin indicate full marks, Answer and four questions)**

1	Summarize the contribution of different eminent scientists in the field of virology	10
2	Explain viral immunity and apoptosis process	10
3	Explain the replication of retro virus	10
4	Synthesize viral purification process	10
5	a. Explain single burst experiment of bacteriophage	5
	b. Illustrate antiviral drug mechanism	5

**Chittagong Veterinary and Animal Sciences University**  
**MS in Microbiology Final Examination**  
**January-June Semester, 2017**  
**Course Title: Mycology and Microbiology of Atypical Bacteria**  
**Course Code: MMA 601**  
**Total Marks: 40      Time: 2 hours**

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

1. a) Differentiate asexual from sexual reproduction in fungi. Give the diagnostic features of *Candida albicans* and *Malassezia pachydermatis* found in clinical specimens. 3+2
- b) List the main dermatophytes affecting animals and their main hosts. Write down the microscopic differentiation of the *Microsporum* and *Trichophyton* species affecting animals. 2+3
2. a) What is hair perforation test? Mention different species of *Trichophyton* associated with hair invasion. 2+2
- b) Write down the virulence factors possessed by *Microsporum* spp. Illustrate the stages in the life cycle of *Pythium insidiosum* in plant tissues. 4+2
3. a) Why chlamydiae have been termed energy parasites? Enumerate Chlamydial pathogens of veterinary and medical importance. 1+3
- b) Write down the microscopic and colonial appearance of *Aspergillus fumigatus*, *Aspergillus niger* and *Aspergillus flavus*. 6
4. a) Give a summary of the diagnostic tests for the identification of the dimorphic fungi. Write down the species of veterinary importance in the family *Anaplasmataceae*. 4+2
- b) Describe the laboratory procedures employed for the diagnosis of avian mycoplasmosis. 4
5. a) Enumerate the principal features of mycotoxicoses. Summarize the factors influencing the production of mycotoxins on growing crops or stored foods and the occurrence of mycotoxicoses in animals. 3+3
- b) Write down the advantages of classical methods for analysis of mycotoxins. 4

Chittagong Veterinary and Animal Sciences University

MS in Microbiology Final Examination

January – June Semester, 2017

Course title: Advanced General Bacteriology

Course Code: AGB-601

Full marks: 40; Time: 2 hours

**Answer any 4 (FOUR) questions.**

1. What are the divisions of Procaryotae? Give a brief description on methanogenic, halophilic and thermoacidophilic bacteria. Name chemical constituents of cell wall of Gram negative bacteria, bacterial capsule and endospore. 10
2. Which bacteria contains “Molecular sieve”? How is it formed? Which mechanism pushes nutrients to higher concentration gradient in bacterial cells from its environment and how such work is performed? 10
3. Give the common characteristics of fermentation and respiratory catabolism. What are the products produced by Pentose-Phosphate Pathway from one molecule of glucose in bacteria? What do you mean by synchronous and nonsynchronous growth of bacteria? 10
4. What are the enzymes required for replication of bacterial DNA? Enumerate the functions of different loops of tRNA. Give a brief note on spontaneous mutation occurred in bacteria. 10
5. Write down the mechanism involved in transformation for Gram positive bacteria. What is the function of restriction–modification (R–M) system during transformation? How F factor is transferred from one bacterium to another? 10

**Chittagong Veterinary and Animal Sciences University**

**MS In Microbiology**

**January- June Semester, 2017**

**Industrial Microbiology**

**Course code: IMB-601**

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

**(Figures in the right margin indicate full marks, Answer any four questions)**

1	a	Mention the codes and practice at BSL-III laboratory	10
2	a	What is screening?	2
	b	Explain different process in the production any industrially important product	8
3	a	List the different fermented product	2
	b	Illustrate procedure of any two of above mentioned product	8
4	a	What is bio-fuel? Why it is so important now-a-days?	3
	b	Mention the production and uses of different bio-fuel	7
5	a	Explain uses of different industrially important enzyme	10

**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 for different species of mammals? 04  
(c) Write down the objectives of CPR in wild animals. Mention about the six steps of CPR 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) Describe the 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 anaesthesia. 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, osteochondritis 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 choice for 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 and Rumenostomy 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 “Mycobacterium 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).

**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 cutaneous 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: 2 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) Write 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<sub>50</sub>? How LD<sub>50</sub> 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 10  
a. Antiseptics and disinfectants b. Chloramphenicol c. Macrolides d. Enrofloxacin e. Cephalosporin f. Metronidazole

**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