Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Metabolic Diseases (Theory)
Course Code: MTD-402
Full Marks: 70; Time: 3 Hours

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

Section-A

1. a) How will you differentiate metabolic diseases from production diseases? 2.0
   b) "Concentrate rich diet is responsible for lameness in feedlot cattle". To what extent you agree or disagree with the statement. 5.0
   c) How will you treat a horse suffering from myoglobinuria? 4.0

2. a) Briefly explain how ketosis is developed in ruminants. 4.0
   b) Write down the clinical findings and its field diagnostic techniques. 4.0
   c) Describe the diagnostic procedure and the line of treatment of hypomagnesemic tetany in cow. 4.0

3. a) A dog is suffering from Polydipsia and gradual weight loss despite normal appetite. Following hemato-biochemical examination noticed ketoacidosis and hyperglycemia. What is your presumptive diagnosis and how does it develop? Write down the line of treatment of this disease. 4.0
   b) How will you manage a pregnant doe of later stage who is suffering from pregnancy toxaemia? 4.0
   c) What is polioencephalomelacia (PEM)? Write down the etiology risk factors and clinical findings of PEM in goat. 4.0

4. Write short notes on **any two** of the followings : 6×2=12
   a) Fibrous osteodystrophy
   b) Peat's scour
   c) Allergic dermatitis

Section-B

5. a) Write down the clinical findings and management practice of Downer's cow syndrome in cow. 4.0
   b) Write down the etiology and clinical findings of Allergic dermatitis. 3.0
   c) Write down the differential diagnosis of the disease associated with recumbency in adult cattle. 4.0

6. a) Write down the line of treatment of manganese and cobalt deficiency in ruminant. 4.0
   b) Is it justifiable to treat a sheep suffering from acetonemia? If yes, how? 4.0
   c) A cow has refused feed for several days, resulting in showing woody appearance. On odor test you noticed that sweetish smell is coming in breath. What is your presumptive diagnosis and how this sweetish odor may develop? 4.0

7. a) Is it possible for you to treat a goat suffering from tetanus? Justify your choice. 4.0
   b) Write down the etiology and clinical findings of post-parturient hemoglobinuria in cow? 4.0
   c) "Milk fever is a misnomer disease". Do you logically agree with the statement? 4.0

8. Write short notes on **any three** of the followings: 4×3=12
   a) Diabetes mellitus in dog
   b) Curl toe paralysis in chick
   c) Sway back disease in sheep
   d) White muscle disease in animal

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Large Animal Medicine-II (Theory)
Course Code: LAM-402
Full Marks: 70; Time: 3 Hours

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

Section-A

1.	a)	How will you diagnose contagious bovine pleuropneumonia in cattle?	3.0
	b)	Write down the epidemiology, methods of transmission, clinical signs and treatment of anaplasmosis in cattle. How will you differentiate it from babesiosis?	6.0
	c)	Why does babesiosis not occur commonly in calves?	2.0
2.	a)	What do you mean by polyarthritis? How will you treat a case of bovine keratoconjunctivitis of seven days duration.	3.0
	b)	Write down the causal agent and epidemiology of dermatomycosis in cattle.	3.0
	c)	How will you diagnosis and control cutaneous myiasis in cattle? Write down the effect and control strategies of tick infestation.	6.0
3.	a)	Mention commercial and generic name of at least three agents used for treatment of pediculosis.	3.0
	b)	What is ring worm? Write down the etiology, clinical signs and line of treatment of ringworm in a calf.	6.0
	c)	Why is ringworm more common in young animals?	3.0
4.		Write the prescription of **any three** of the following cases :	
	a)	A cow of 300 kg body weight affected with tick paralysis	3.0
	b)	A buffalo calf affected with ascariasis	3.0
	c)	A horse of 400 kg body weight suffering from acute abdominal pain, licking of abdomen and rolling on the ground.	3.0
	d)	A calf of 60 kg body weight with emaciation and forces with boiled rice appearance	3.0

Section-A

5.	a)	Write down the clinical findings and diagnosis of acute and chronic fascioliasis?	4.0
	b)	Write down the line of treatment of paramphistomiasis in calves.	3.0
	c)	What do you mean by nodule worm disease? Write down its etiology, clinical signs and pathologic significance.	4.0
6.	a)	Mention the name of several blood parasites of animal.	2.0
	b)	Mention clinical signs, diagnosis and treatment of *Strongylus vulgaris* infestation in horse.	5.0
	c)	Write down the diagnosis and treatment of monieziasis in calves.	5.0
7.	a)	What is myasis? How will you manage a case of myiasis interdigital space of a cow developed as the complication of FMD?	5.0
	b)	Calf coccidiosis is more common during rainy season in our country, why? Write its clinical signs and the line of treatment.	5.0
	c)	Write a prescription for a calf of 50 kg body weight affected with mange.	2.0
8.	a)	Write down the etiology, clinical signs, diagnosis and pathologic significance of verminous pneumonia in a heifer.	5.0
	b)	Mention the clinical signs and line of treatment of Mycoplasmal mastitis in a cow.	4.0
	c)	What measures will you take to treat a heifer affected with levamisole poisoning?	3.0

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Livestock Marketing
Course Code: LMR-402
Full Marks: 70.0; Time: 3.0 Hours

(Figures in the right margin indicate full marks. Answer any **three** questions from each section where **Questions No. 1 and 5 are Compulsory**. Use separate answer script for each section)

Section-A

1. a) Define marketing and business. Classify markets on the basis of location and competition. 3.0
   b) Distinguish marketing between agricultural and manufactured products. 4.0
   c) Briefly discuss the necessity of studying livestock marketing as a student of Veterinary Medicine. 4.0

2. a) Define marketing efficiency. Write the forms of marketing efficiency. 4.0
   b) Explain the indicators for measuring livestock marketing efficiency in our economy. 4.0
   c) What are the factors that are responsible in decreasing marketing efficiency. 4.0

3. a) What do you mean by processing. 2.0
   b) Explain the advantages of processing of livestock products. 6.0
   c) Do you support processing of eggs for Bangladeshi market? Explain your arguments. 4.0

4. a) Identify the intermediaries. Who are involved with raw hides and skins marketing in Bangladesh. 2.0
   b) What are the major problems in selling raw hides and skins especially doring Eid-ul-Azha in Bangladesh? 5.0
   c) What measures would you suggest to overcome all those problems in hides and skins marketing. 5.0

Section-B

5. a) Distinguish between whole selling and retailing. 2.0
   b) Discuss the importance of whole sellers and retailers in marketing of livestock. 6.0
   c) Do you consider the marketing intermediaries are essential in marketing system? Explain. 3.0

6. a) What is meant by brand? 2.0
   b) Discuss the advantages and disadvantages of branding for milk in Bangladesh. 6.0
   c) Briefly discuss the cost items involved in branding milk in the country. 4.0

7. a) What do you mean by co-operative system? Classify co-operative marketing society? 3.0
   b) State the principles and functions of co-operative societies. 4.0
   c) Write the limitations of co-operative marketing societies in Bangladesh. 5.0

8. a) What is marketing research? Write the importance of marketing research. 3.0
   b) Briefly discuss the steps for conducting a marketing research. 6.0
   c) Write short notes on "Marketing MIX". 3.0

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Veterinary Jurisprudence (Theory)
Course Code: VJR-402
Full Marks: 35; Time: 2 Hours

(Figures in the right margin indicate full marks. Answer any **two** questions from each section where **Questions No. 1 is Compulsory**. Use separate answer script for each section)

Section-A

1. a) Define Law, Act and Ordinance with examples. 3.0
   b) What do you mean by "Oath and Evidence"? Write the Veterinarian's oath as a Professionalist. 5.0

2. Two dogs were admitted in the TVH. One had a history of gunshot wound and the other had stabbed wound. How can you-
   a) Differentiate between two wounds. 4.0
   b) Certify these dogs. 5.0

3. a) Why does animal need to be registered? 2.0
   b) In our country which animals should be brought under insurance policy and why? 2.0
   c) Define Animal Welfare. What are the needs for objective scoring of animal welfare and how welfare assessment done? 5.0

Section-B

4. a) Outline the constraints of establishing legislations against animals and their diseases in Bangladesh. 2.0
   b) Explain different Veterolegal wounds. 3.0
   c) A cow worth about 1 lakh BDT died due to suspected case of poisoning. How can you collect, preserve and dispatch samples to the laboratory for confirmatory diagnosis for veterolegal aspect. 4.0

5. a) Describe different ways of animal sufferings caused by human activities. 7.0
   b) What are the scopes of Veterinary Jurisprudence? 2.0

6. Write short notes **(Any three):** 3×3=9
   a) Insurance of Animals.
   b) Sign of Death
   c) Stress, Distress and Stunning.
   d) Glander's and Fercy Act

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Agricultural Extension (Theory)
Course Code: AEX-402
Full Marks: 55; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **three** questions from each section of which **Question No. 1 is compulsory**. Use separate answer script for each section.)

Section-A

1.	a)	What do you mean by extension education?	2.0
	b)	State the objectives of extension education.	3.0
	c)	"Extension is a continuous education at process where both learner and teacher contribute and receive"-Justify the statement.	5.0
2.	a)	What is communication? State the importance of communication in technology transfer.	3.0
	b)	Write down the factors which are affecting "effective communication".	3.0
	c)	Briefly explain the importance elements of communication.	3.0
3.	a)	What is innovativeness and adopter category?	2.0
	b)	Describe the innovation decision process with a neat diagram.	7.0
4.	a)	Define education. Classify education with examples.	3.0
	b)	Extension is a two-way-channel-Explain.	3.0
	c)	Enlist the principles of extension education. Briefly describe any two of them.	3.0

Section-B

5.	a)	Define organization with examples.	2.0
	b)	What are the salient features of an extension organization?	5.0
	c)	Enlist three government and three private organizations those provide extension service in agricultural development.	2.0
6.	a)	What is leadership? Write down the importance of leadership in transfer of livestock related technologies to the farmer.	3.0
	b)	What are the most important features to justify an individual as a good leader?	3.0
	c)	"Dissemination of any livestock technology mostly depends on efficacy of local leaders"-Justify.	3.0
7.	a)	Good leaders are made, not born-Explain.	2.0
	b)	Why do people get interested to work as local leader?	2.0
	c)	Distinguish between professional leader and local leader.	5.0
8.		Write short notes **(Any three)** :	3×3=9.0
	i)	Farm and home visit	
	ii)	Importance of extension	
	iii)	Procedure to develop personality	
	iv)	ICT in livestock extension services	

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Animal Biotechnology (Theory)
Course Code: ABT-402
Total Marks: 55; **Time**: 3 Hours

[Figures in the right margin indicate full marks. Answer any <u>three questions</u> from each section where <u>Question No 1 is compulsory</u>. Use separate answer script for each section.]

GROUP-A

Q1	**a.**	Define **Animal Biotechnology**. What are the impacts of biotechnology on animal industry?	**5 (2+3)**
	b.	Give definition of **"Recombinant DNA Technology"**. How will you produce transgenic animal?	**5 (1+4)**
Q2	**a.**	Define the term **"Artificial Insemination"**. Give a brief description on semen collection method.	**5 (2+3)**
	b.	Write the advantages and disadvantages of Artificial Insemination. What do you understand by the evaluation of semen?	**4 (2+2)**
Q3	**a.**	Define **"In-Vitro Fertilization"** and write its potential uses.	**3**
	b.	Describe the procedure of In-Vitro Fertilization for embryo production in ruminants.	**3**
	c.	Give a short note on **GMO**.	**3**
Q4	**a.**	Briefly describe the term **"Cloning"**.	**5**
	b.	Illustrate the essential steps involved in Gene Cloning.	**4**

GROUP-B

Q5	**a.**	Write down the application of **Genetic Engineering**.	**3**
	b.	What do you mean by **Transgenesis**?	**2**
	c.	Write down the semen dilution procedure of bull.	**4**
Q6	**a.**	Write down the semen deposition site, semen volume and number of motile sperms for the **Cow, Doe, Sow and Mare**.	**3**
	b.	Write down the impact of **MOET** in animal improvement.	**3**
	C.	What is **Embryo Transfer**? Write down the objectives for Embryo Transfer in cow.	**3**
Q7	**a.**	Differentiate between the terms **"IVM"** and **"IVF"**.	**2**
	b.	Write down the application of **IVF**.	**3**
	c.	Give a short discussion about physical properties of semen.	**4**
Q8		**Write short notes on <u>any three</u> of the followings:**	**3*3=9**

a. Embryo sexing and splitting
b. Super-ovulation
c. AV method
d. Freezing of semen

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Theriogenology (Theory)
Course Code: THL 402 (T)
Full Marks: 70; Time: 3.0 Hours

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

Section-A

1. a) What does it mean by the name of 'Theoriogenology and Gynaecology'? 1
   b) A dairy cow is brought to the SAQTVH with a history of possible Oestrus. Now you are asked to enlist signs of estrus of the you have observed. Describe the signs of other stages of oestrus cycle. 6

2. a) Define puberty. What are the factors offering the onset of puberty in heifers? 5
   b) What are the origin and functions of GnRH, FSH, Progesterone and Oxytocin hormones? 2

3. a) Describe the types of placenta with examples. 5
   b) What are the materials that are exchanged through the placenta? 2

4. a) Illustrate the phenomenon of maternal recognition of pregnancy in a cow. 3
   b) What are the methods for pregnancy diagnosis? Briefly describe the rectal palpation and Ultrasonography scanning for pregnancy diagnosis in animal. 4

5. a) How will you manage a repeat breeder cow? 5
   b) Write down the different types of uterus with examples in animal. 2

6. a) Briefly describe the stages of parturition in a cow. 3
   b) Mention the hormones/devices use for oestrus synchronization in cow/ sheep/goat. Describe the advantages and disadvantages of P_4 and PGF2α for estrus synchronization. 4

Section B

7. a) Write down the importance of AI in livestock. Briefly describe the steps and the procedure of AI in cow. 4
   b) Mention the criteria for an ideal semen diluent. Make a semen diluent for bull semen. 3

8. a) Define Spermination, Intromission, Emission and Ejaculation. 2
   b) Write down the procedure for semen freezing with principles that should be followed during transportation of frozen semen. 5

9. a) What is fertility and sterility? 1
   b) Discuss briefly the functional form of infertility in a dairy farm. 6

10. a) Mention five abnormal presentations of foetus which cause dystocia in cow. 3
    b) What approach should you take to an obstetrical case? 4

11. a) Describe the aseptic steps to be followed during semen collection for preservation. 2
    b) Write down the different forms of sperm abnormalities in a bull. 2
    c) List the common post partum complications in a cow. 3

12. Write short note on the followings (**Any two**) 3.5x2=7
    a) Veterinary control of reproductive health management
    b) Post-partal anestrus
    c) Embryonic death

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Hides, Skins and Wool Technology
Course Code: HWT-402
Full Marks: 55.0; Time: 3.0 Hours

(Figures in the right margin indicate full marks. Answer any **three** questions from each section where **Question No. 5 is Compulsory**. Use separate answer script for each section)

Section-A

1. a) What do you mean by hide, skin, fur and fancy skin and leather? 3.0
   b) Differentiate between cattle and buffalo hides in a tabular form. 3.0
   c) Briefly discuss the chemical composition of hides and skins. 3.0

2. a) Discuss the butcher cuts available in tropical countries? 2.0
   b) Briefly discuss the different types of damages and defects responsible for production of poor quality hides and skins during slaughter in Eid-ul-azaha by the amateur flayers. 4.0
   c) Discuss the roles of veterinarians in the in the production of good quality hides and skins in Bangladesh. 3.0

3. a) List the role of different important animal species of which hides and skins are tanned in different countries of the world. 3.0
   b) Write down the chemical composition of wool fibre. How and why wool does act as a good quality fire extinguisher? 4.0
   c) Briefly discuss the hide and skin sections in Bangladesh. 2.0

4. a) List the different microorganisms which are responsible for the putrefaction of hides and skins in tropical countries. 3.0
   b) Define denatured salts and khari salts with their composition. Give a short description about the frigorificus process of wet salting. 3.0
   c) Write down the effects of bacteria and mold attack on raw hides and skins with their counter measures. Why raw salt is not suitable for prevention of raw hide? 3.0

Section-B

5. a) Elaborate the following terms **(Any eight):** 10.0
   (i) Liming (ii) Leather
   (iii) Mohair (iv) Fallen hide
   (v) Felting (vi) Meating and fatting
   (vii) Flay cuts (viii) Grading of cattle hides
   (ix) Hair strips (x) Prospects of leather industry in Bangladesh

6. a) Briefly discuss the different processes of drying raw hides and skins. 3.0
   b) Define physical properties of leather. Why tensile strength is important for measuring the quality of finished leather. 3.0
   c) Define tanning. Discuss the steps of tanning from green hide to finished leather. 3.0

7. a) Why buffalo hide produces harness leather with rustic grain pattern? 3.0
   b) Give a brief statement on environmental hazards occurred by tannery effluent and solid wastes. Show their possible remedies. 3.0
   c) Briefly discuss the microscopic structure of hides and skins. 3.0

8. a) Briefly discuss the reasons why khari salts are more preferable for curing raw hides and skins in Bangladesh. 3.0
   b) Draw and label the morphological structure of a completely developed wool fibre. 3.0
   c) Briefly discuss the factors affecting price of market wool. 3.0

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2016
Course Title: Veterinary Public Health (Food Hygiene and Zoonosis)
Course Code: VPH 401 (T)
Full Marks: 70; Time: 3.0 Hours

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

Section-A

1.	a)	Define zoonosis. Classify zoonosis with example of each class.	4
	b)	What are the core domains of Veterinary Public Health? State their importance in a brief.	3
2.	a)	Which is the most important zoonotic disease in Bangladesh in your opinion? How will you detect the disease in human and animals?	4
	b)	State your recommendations for the control, prevention and eradication of rabies from rural area.	3
3.	a)	Explain the application of HACCP in food industry.	7
4.	a)	Define meat hygiene.	2
	b)	Outline the chronological historical development in meat hygiene.	3
	c)	Define carcass yield in different animals.	2
5		Write short notes on: DFD meat, pasteurization, PSE and section of abattoir	7
6.	a)	Summarize the chief treatments which are applied before slaughtering of animals with their objectives.	3
	b)	Indicate the principles of slaughtering in animals.	2
	c)	Express the procedure of halal slaughtering.	2

Section B

7.	a)	Write down the modus operandii of stunning in animals before slaughter.	3
	b)	Indicate the principles of planning to set up an abattoir.	2
	c)	Illustrate abattoir effluent treatment.	2
8.	a)	Mention the values of ante mortem examination in meat hygiene practice	2
	b)	What are the possible recommendations and decisions given by a veterinarian at ante-mortem inspection	2
	c)	List the lymphnodes which should be examined during post mortem examination.	3
9.	a)	Recall the name of molds and group of bacteria which are pertinent for food microbiology.	3
	b)	What are the chief compositional factors of food which have influence on the growth of microorganisms? Explain any three of them.	2
	c)	Tell the different methods of food preservation. Explain any three of them.	2
10	a	Mention the contamination of milk.	3
	b	Summarize the spoilage of milk.	4
11	a	Explain the contamination, preservation and spoilage of egg.	7
12	a	What are the types of bacteria which can grow at different temperatures in fish?	2
	b	Discuss the different ways to preserve fish.	3
	c	How can you detect that the fish is spoiled?	2

Chittagong Veterinary and Animal Sciences University
DVM 4th Year 2nd Semester Final Examination 2015
Course Title: Zoo and Lab. Animal Medicine (Theory)
Course Code: ZAM-402
Full Marks: 55; Time: 3 Hours

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

Section-A

1.	a)	Enlist the protected areas of Bangladesh for wildlife.	1.0
	b)	What is meant by 'IUCN', 'Endangered', 'Extinct', and 'Near Threatened'?	2.0
	c)	Discuss the roles of wildlife veterinarians for the conservation of wild fauna in Bangladesh.	3.0
	d)	Define Zoo, Aquarium and Safari Park with examples.	3.0
2.	a)	List the zoonotic disease of primates. Write down the etiology, clinical finding, diagnosis, treatment and control measures of TB in monkey.	6.0
	b)	How will you protect the monkeys from parasitic diseases in the Dhaka Zoo?	3.0
3.	a)	What is Musth? How will you restrain an excited elephant at the time of Musth at Bangabundhu Sheikh Mujibur Rahman Safari Park, Dulahazra, Chokoria and Cox's Bazar?	3.0
	b)	Write down the clinical findings, treatment and control of Anthrax in Asian Elephants in a Zoo.	4.0
	c)	How will you protect the elephant from rabies infection in a Safari Park or Zoo?	2.0
4.	a)	Describe briefly the etiology, clinical signs, post-mortem lesions and treatment of chlamydophillosis in a Hilly Mynah.	3.0
	b)	Name two important viral diseases of pheasant in which the pathognomonic clinical post-mortem lesion is hepatomegaly. How will you differentiate them?	4.0
	c)	Write down the etiology, clinical signs and treatment of Sarcoptic mange infestation in a Llama.	2.0

Section-B

5.	a)	Write down the etiology, transmission, routes of infection, clinical signs, post-mortem lesions, diagnosis, treatment, prevention and control of Feline panleukopenia in the Royal Bangal Tiger at Bangabandhu Sheikh Mojibur Rahman, Safari Park, Dulahazra, Chokoria and Cox's Bazar.	4.0
	b)	Write down the prescriptions of the followings:	1.5×4=6.0
		i) An Asiatic Black Bear of 150kg body weight is suffering from Hook worm infestation.	
		ii) An Ostrich of 50kg body weight is suffering from clubbed feet.	
		iii) An Gorilla of 75kg body weight is suffering from bacterial enteritis.	
		iv) A Barking deer of 60kg body weight is suffering from Fascioliasis.	
6.	a)	Write down the etiology, clinical findings and treatment of Pyometra in a Gaur.	3.0
	b)	How will you reduce the incidence of Cannibalism in Crocodiles at Reptiles Farm, Valuka, Mymensingh?	3.0
	c)	Write down the etiology and clinical findings of crop impaction in a 5 month old pheasant. How will you handle the case?	3.0
7.	a)	Describe the etiology, clinical findings, treatment and control of Pouch infection of Koala in Melbowne National Zoo, Australia.	3.0
	b)	Write down the etiology, clinical signs, post-mortem lesions and treatment of Tyzzer's disease in weaning rabbit at Rahim Rabbit Farm, Napithkhola, Muktagacha, Mymensingh.	3.0
	c)	Write short note on "Nipah virus" infection by fruit bat in the world.	3.0
8.	a)	Write down the etiology, transmission, clinical syndrome, zoonotic importance and treatment of plague in Golden hamster at Animal Resourch Branch, ICDDR'B, Mohakhali, Dhaka.	3.0
	b)	What do you understand by the term "Mycobacterium Avium Complex (MAC)" in Tapir? Describe its clinical signs, post-mortem lesions, diagnosis and treatment.	3.0
	c)	Briefly describe the etiology, clinical findings, post-mortem lesions, diagnosis and treatment of Johne's disease in Giraffe.	3.0