

Chittagong Veterinary and Animal Sciences University

DVM 4th year 1st Semester Final Examination 2018

Subject: Anesthesiology and Operative Surgery (Theory)

Course Title: AOS-401 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. **1** and **5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) What is the name of first recorded aesthetic used in veterinary? Mention the name of at least three latest anaesthetics used for veterinary practice. 2
b) Mention at least two effects of general anaesthetics on cardiovascular, nervous and respiratory system in animal. 4
c) Define tranquilizer, narcotic, catalepsy, neuroleptanalgesia and basal anaesthesia. 5
2. a) Justify the use of analgesic in the premedication plan of an animal going for surgery. What local anesthetic techniques are most frequently employed in ruminants and swine? 4
b) Mention at least 5 premedicants with doses commonly used in veterinary anaesthesia. 5
c) Does neuromuscular blocking agents (NMBAs) provide sedation or analgesia? Mention the use of at least two spasmolytic in veterinary practices. 3
3. a) Mention at least 10 signs tested during anaesthesia in animal. 5
b) Describe different eye positions and pupil size during general anesthesia of a dog. 5
c) How will you confirm the anesthetic overdose in animal? 2
4. a) Why fluid therapy is important in veterinary surgery? What are the common colloids and crystalloids used in veterinary surgery? 5
b) How will you calculate the amount of fluid required for an adult dog of 22lb with 7% dehydration? History revealed that, the dog vomited 70 ml of fluid overnight. 5
c) How quickly does fluid administered in the body during fluid therapy at operation theatre? 2

SECTION-B

5. a) Surgical asepsis prevent the contamination of surgical wound-explain. 2
b) What are the common sites for urolith in goat and cattle? Differentiate between "urethrotomy" and "urethrostomy". 3
c) Mention the age, preoperative preparation, operative procedure and complications of castration in goat. 6
6. a) How will you differentiate ruminal acidosis from bloat in ruminant? 2
b) Briefly describe the predisposing factors and treatment of LAD in a cow. 4
c) What are the possible treatment options for ruminal acidosis? Briefly describe rumenotomy in cattle. 6
7. a) Define caponization and spaying in animal. Why age is important factor for these operations? 3
b) What are the indications for neutering and spaying in cat? 3
c) How will you treat a bitch suffering from pyometra? 6
8. Write short notes on any three of the followings. 3x4=12
a) Surface anaesthesia
b) Delayed recovery of GA
c) Aural hematoma
d) Correction of teat fistula of a cow

Chittagong Veterinary and Animal Sciences University

DVM 4th year 1st Semester Final Examination 2018

Course Title: Veterinary Epidemiology (Theory)

Course Code: VEP- 401 (T)

Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. 1 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) The herd immunity threshold of peste des petits ruminants is supposed to be 83%. 2
What does it mean?
b) Interpret the following parameters. 1X3=3
(i) Risk ratio=4.5
(ii) Odds ratio=3.5
(iii) Rate ratio=0.50
2. a) Distinguish different measures of disease frequency in a defined population 3
according to numerator, denomination and time.
b) Interpret the following measures: Prevalence of disease =0.3, rate of 3
disease=0.01 and fatality=0.15
3. a) Temporality is one of the most important causal criteria. Briefly explain with an 4
example.
b) Define basic rate reproduction (R) net rate reproduction. 2
4. a) Briefly differentiate different epidemiological study designs. 2
b) Sketch a case control study of clinical Newcastle disease in pigeon based on 2
Teaching Veterinary Hospital data, CVASU.
c) Enlist potential biases that usually occurs in different epidemiological studies and 2
how to deal with those.

SECTION-B

5. a) What do you mean by "Reference population", "Source population", "Sampling 2
frame" and "study population"?
b) Classify sampling technique and their merits and demerits. 2
c) Explain sampling error and 95% confidence interval. 2
6. a) Write differences between "Primary" and Index" cases. 1
b) How will you proceed to investigate an infectious disease outbreak 3
investigation?
c) Draw a hypothetical "Epi curve" and interpret the figure. 2
7. a) What are the main epidemiological features of a lab Test? 2
b) Interpret a "Receiver operating characteristic (ROC)" curve. 2
c) Explain the relationship between "Predictive values" and disease prevalence in a 2
defined population.
8. a) Show the components of disease surveillance cycle. 2
b) Write relative merits and demerits of different surveillance programmes. 2
c) Write short note on "Randomized controlled trial". 2

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DVM 4th year 1st Semester Final Examination 2018

Subject: Farm Animal Medicine (Theory)

Course Title: FAM-401 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. **2 and 5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Write down the clinical signs of the following diseases: 3x3=9
 - i) Actinobacillosis in bull
 - ii) Dermatophilosis in heifer
 - iii) Glanders in stallion
- b) How will you differentiate udder edema from inflammation in udder? 3
2. a) How will you differentiate a case of anthrax from BQ and lead poisoning? 3
- b) What are the cardinal signs for a bacterial malady of HS in buffalo? 2
- c) Write down the field diagnostics and treatment of subclinical mastitis in cows. 4
- d) What are the possible factors that induce a heifer to be more susceptible to wooden tongue condition in cattle herds? 2
3. a) How poultry manure is associated with botulism in cattle? Write down the epidemiology, clinical signs, diagnosis and treatment of black quarter in calves. 5
- b) Write down the important clinical signs and line of treatment in a cow suffering from infectious kerato-conjunctivitis. 4
- c) How will you prepare autogenous vaccine for the treatment of papillomatosis in a heifer? Mention the dose and routes of administration. 3
4. Write down the prescription of following diseases (Any three): 3x4=12
 - a) Strangles in a 200 kg body weight stallion
 - b) Foot-rot in a 150 kg body weight heifer
 - c) Gangrenous mastitis in a 30 kg body weight doe.

SECTION-B

5. a) Mention the grading of mastitis? Write down clinical signs and treatment of Grade III mastitis in cross bred cows? 4
- b) A doe of 40 kg body weight aborted on 4th month of gestation. What are the possible causes of diseases you may consider? How can you differentiate them. 4
- c) Write down the diseases affecting nervous system in sheep and goat. Give the line of treatment of listeriosis in a sheep. 3
6. a) Enlist the vesicle forming viral diseases of ruminants? Provide the line of treatment of goat pox. 3
- b) Write down the etiology, predisposing factors and line of treatment of tetanus in a kid. 4
- c) Briefly describe the clinical manifestations, diagnosis and line of treatment of PPR in goats. 5
7. Write the differences between the following diseases in cattle: 3x4=12
 - a) Actinobacillosis and caseous lymphadenitis
 - b) Listeriosis and leptospirosis
 - c) Foot rot and FMD
8. a) How can you prevent and control mastitis a dairy farms? 5
- b) What are the diseases that can be confused with Bovine viral diarrhoea? How can you differentiate them? 3
- c) In which disease biphasic fever and shifting lameness are common clinical manifestations. 1
- d) Write down the predisposing factors and line of treatment with justification of used drugs of this disease in a bull. 3

Chittagong Veterinary and Animal Sciences University

DVM 4th year 1st Semester Final Examination 2018

Subject: Gynaecology and Obstetrics (Theory)

Course Title: GOB-401 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer **any five (5)** questions from each section. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Define theriogenology. List the pituitary hormone with their function. 4
b) Classify mammals' uterus according to gross morphology with an example in each case. 3
2. a) Why female hypothalamus does not defeminized? 3
b) Which criteria can be used to define puberty in male and female mammals? 4
3. a) What type of steps should be taken to maximize the fertility in repeat breeding syndrome cows in a dairy farms? 3
b) Briefly describe luteolysis in regular cyclic farm animals. 4
4. a) What are the pregnancy recognition factors of cow, mare, sow, women and sheep? How does pregnancy establish in cow? 5
b) Classify the placenta according to distribution of chorionic villi with an example. 2
5. a) What is lochia? Discuss process of uterine involution in recently calved dairy cows. 4
b) Write down the causes and treatment of puerperal metritis in cows. 3
6. Mention the causes and clinical management of following obstetrical diseases-
a) Retention of placenta in dairy cows. 3.5
b) In complete dilatation of cervix in a multi-parus cow. 3.5

SECTION-B

7. a) Differentiate between Dystocia and Eutocia. 2
b) Explain the correction and delivery of fetus in a cow due to- 2.5x2=5
i) Lateral deviation of head ii) Breech presentation
8. a) Examine a bitch for its pregnancy. 3
b) A cow after completion of gestation period (280 days) having sign of parturition but no fetal fluid and sac comes out through vulva. What is your diagnosis? How will you manage this condition? 4
9. Prepare a plan for the treatment of the following obstetrical diseases: 1.75x4=7
i) Septic metritis ii) Uterine prolapse
iii) Ring womb iv) Uterine inertia
10. a) How will you proceed to diagnose a case of dystocia? 3
b) Draw and label ovary and extra-embryonic sac. 4
11. a) A farm owners having 100 dairy cows would like to get calves at a same time by using hormonal product available in Bangladesh. Construct appropriate plan for him. 3
b) Evaluate a female cow for utilizing in breeding purpose. 4
12. a) How many follicular waves occur during one cycle in mammals? Mention the hormonal level in each wave. 3
b) Sketch the ovulation process in mammals. 4

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DVM 4th year 1st Semester Final Examination 2018

Subject: Entrepreneurship and Business Management (Theory)

Course Title: EBM-401 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer Three (3) questions from each section, where question No. 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Explain the basic functions of Management. 3
b) Differentiate between a Manager and a leader. 4
c) Point out the qualities of a good leader with example. 4
2. a) Demonstrate the Strategic Management Process. 4
b) Develop a Mission Statement and a Vision Statement for a hypothetical Dairy Processing plant. 4
c) Interpret SMART Objective. 4
3. a) Show the general skills you need to develop if you like to be a good manager. 4
b) Identify the elements of Directing. 4
c) Summarize the Control Process. 4
4. a) Define a project. Why is project identification very crucial to the entrepreneurs? 4
b) What is a SWOT analysis? When should an entrepreneur use SWOT analysis? 4
c) Discuss the elements of a SWOT analysis. 4

SECTION-B

5. a) A manager must spend time connecting with employees on an interpersonal level. When a manager communicates, motivates, inspires, and encourages employees towards a higher level of productivity-what function is that manager performing? Why is this function essential for managing a business? 4
b) Veterinary hospitals and clinics are no different than any other business in many respects. Do you agree? Justify your statement. 4
c) What are the challenges faced by the human resource managers? 3
6. a) Explain the functions of an entrepreneur. 4
b) Summarize the role of an entrepreneur in nation building. 4
c) Interpret the recent entrepreneurial trends. 4
7. a) Describe the Five C's of the Entrepreneurship Ecosystem. 4
b) Identify the problems in entrepreneurship development in Bangladesh. 4
c) Propose some ideas to government how to develop entrepreneurship in Bangladesh. 4
8. a) What is a business environment? 2
b) What are the elements of an environment? Discuss. 5
c) Discuss some internal factors in a business environment that may impact a veterinary medicine company's plan to expand. 5

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DVM 4th year 1st Semester Final Examination 2018

Subject: Avian Medicine (Theory)

Course Title: AVM-401 (T)

Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. 1 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Prepare a vaccination schedule for a commercial layer farm 2
b) Enlist the vertically transmitted diseases and immune-suppressive diseases of poultry 2
c) Name the neoplastic diseases of poultry 1
- 2 a) Describe etiology, epidemiology, clinical signs, post-mortem findings and treatment of black head disease in turkey. 4
b) How will you control the ascariasis in a commercial layer farm? 2
- 4 a) A layer farmer comes with two live birds of 24 weeks' age, showing open mouth breathing, sneezing, and edema around the eyes with a history of rapid spreading, high morbidity but low mortality. What will be your diagnosis and how will you treat this flock? 4
b) Watery albumin is present in eggs in a commercial layer. What is your diagnosis and write down the post-mortem lesions of this disease? 2

SECTION-B

5. a) Mention the reasons of frequent emergence of new strains of avian influenza (AI) virus. Describe the clinical signs, post-mortem lesions and diagnosis of AI in chicken 1+3=4
b) Write the clinical signs and treatment of bumble foot disease in chicken 2
6. Differentiate between: 3X2=6
i) Marek's disease and lymphoid leukosis
ii) Infectious bronchitis and infectious laryngotracheitis
iii) Ulcerative enteritis and necrotic enteritis
7. a) Write the clinical signs, gross lesions, diagnosis and treatment of fowl cholera in chickens 4
b) Write down the clinical signs of - 0.5X4=2
i) Newcastle disease in pigeons
ii) EDS76
iii) Pullorum disease
iv) Fowl pox
8. a) Write in details about the poultry vaccines produced by LRI, Bangladesh 3
b) Define gout. Write the risk factors, types, post-mortem lesions and mechanism of occurring gout in poultry 3

Chittagong Veterinary and Animal Sciences University

DVM 4th year 1st Semester Final Examination 2018

Course Title: Preventive Veterinary Medicine (Theory)

Course Code: PVM-401 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **Three (3)** questions from each section, where question No. **1 & 5** is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Define Prevention, eradication and elimination. 3
b) Briefly describe the scope of preventive veterinary medicine. 3
c) Illustrate the causes of disease development in a community. 5
2. a) Define bio-security. What are the major components and goals of biosecurity. 3
b) Briefly describe the principles of biosecurity in a farm. 4
c) What is udder health? Discuss the steps in a udder health control program. 5
3. Differentiate between 4x3=12
a) Survey and surveillance
b) Sensitivity and specificity
c) Ring vaccination and Blanket vaccination
4. a) What are the high risk points of a poultry farm? Briefly describe the segregation and traffic control elements of biosecurity. 4
b) Prepare a vaccination schedule for poultry and ruminant using vaccines produced by LRI. 4
c) State the direct and indirect methods of disease control for production diseases. 4

SECTION-B

5. a) What is quarantine? Enumerate the relations between rabies virus shedding and the quarantine of dogs. 4
b) What adjunct methods or procedures should be implemented in a community to enhance the rabies control? 4
c) Define outbreak investigation. What are the steps in outbreak investigation? 3
6. a) What is BCR? State the significance of BCR in disease control strategy. 3
b) Illustrate Biological control in cattle farm with BCR. 5
c) Sketch a strategic plan for disease control in wild life. 4
7. a) What is risk zone? Briefly describe the bases for dividing a country into different risk zones for the prevention of FMD infection. 5
b) Briefly describe the pasture practices for reducing parasitism in a farm. 3
c) What is RRT? What are the composition of RRT? Briefly describe the activities implemented by RRT for controlling FMD. 4
8. a) Define herd health and stockmanship. Briefly describe the steps of herd health planning in a dairy farm. 3
b) Enlist the nutritionally related dairy herd diseases. Enumerate the nutritional strategies to prevent milk fever in a cow. 5
c) How would you minimize the stresses in birds to prevent ND in a poultry farm? 4

Chittagong Veterinary and Animal Sciences University

DVM 4th year 1st Semester Final Examination 2018

Subject: Animal Welfare and Veterinary Ethics (Theory)

Course Title: AWE-401 (T)

Full Marks: 35, Time: 2 Hours

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SECTION-A

1. a) What is "Animal welfare"? Why cattle is called sentient animals? 1
b) Briefly describe the five freedoms of animal welfare. 2
c) Why veterinarian should have fair knowledge on animal welfare? 2
2. a) What are the duties and responsibilities of a veterinarian to promote animal welfare in Bangladesh? 3
b) Write down the methods of slaughter? Discuss the animal welfare issues during pre-slaughter handling and post-slaughter in Bangladesh. 3
3. a) What are the OIE standards on animal welfare? List the welfare indicators during slaughtering of animals. 2
b) What type of causes should be considered during transport, sale yard practice and humane slaughter of cattle? 2
c) Write down the principles of Veterinary ethics. 2
4. a) Briefly discuss the OIE guidelines on land transport of cattle. 3
b) What is HARs? What points could be considered to monitor the welfare of dairy production system. 3

SECTION-B

5. a) What are the methods of dog population control? 1
b) What is CSVr? Briefly discuss the surgical sterilization of street dog control in Bangladesh. 3
c) Define the humane methods of killing of animals. 2
6. a) Enlist the stressor and useful stress indicators in plasma during transport. 2
b) Write the name of Sustainable Development Goals (SDGs) that are related with livestock. Briefly discuss the relationship between animal welfare and SDGs. 3
c) What are the causes of stereotype? 1
7. a) Write down three common offences against animals with examples. 2
b) How will you promote animal welfare in Bangladesh? 2
c) What are the welfare problems of broiler in Bangladesh? 2
8. Write short notes on any three (3) of the followings: 3x2=6
a) Witness
b) Veteo-legal wound
c) Veterinary certification
d) Bangladesh animal disease Act-2005

Chittagong Veterinary and Animal Sciences University

DVM 4th year 1st Semester Final Examination 2018

Subject: Avian Pathology (Theory)

Course Title: APT-401 (T)

Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question No. 1 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Define Zoonotic disease. Enlist ten zoonotic diseases of poultry. What type of precaution do you take during post-mortem examination of avian influenza affected poultry? 3
- b) How do you differentiate between NCD and AI by performing post-mortem examination and mortality rate? 2
2. a) Write down the pathogenesis and pathology of mycoplasmosis in broiler. 4
- b) What is the relationship between infectious bronchitis and visceral gout? 2
3. a) Define immune suppressive disease? What are the immune suppressive diseases in Broiler? How you differentiate between chronic avian coccidiosis with histomoniasis by performing post-mortem and microscopic examination? 4
- b) Write down the post-mortem findings of IBD. 2
4. Write down the post-mortem finding of the following diseases (Any four): 3x2=6
 - a) Duck plague
 - b) Fowl cholera
 - c) New castle disease
 - d) Avian influenza
 - e) Colibacillosis

SECTION-B

5. a) Name the common diseases of poultry caused by Gram-Negative bacteria. Describe the pathogenesis and pathology of fowl typhoid. 5
- b) Write down microscopic lesions of avian T.B. 1
6. a) Why vitamin A is important in poultry? What type of lesions are produced in the oesophagus of layer bird due to deficiency of vitamin- A? 3
- b) Describe the conditions produced in poultry due to deficiency of vitamin-E. 3
7. a) Which protozoan disease is most common in poultry? Write down its pathogenesis and pathology. 4
- b) Briefly describe pathogenesis and pathology of brooder pneumonia. 2
8. a) Which bacterial disease spreads very rapidly? Write down the pathogenesis and pathology of this disease. 4
- b) Write a short note on lymphoid leucosis. 2