

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2022
Course Title: Avian Pathology (Theory)
Course Code: APT-401
Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer any **three (3)** questions from each section where question number **1** is compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer together.)

SECTION-A

1. (a) Enlist the pigeon diseases prevalent in Bangladesh with their causal agents. 1
(b) Enumerate the etiology, pathogenesis and postmortem findings of 'canker' of pigeon. 4
2. (a) Enlist the septicemic diseases of poultry. Write down the pathogenesis and postmortem findings of 'pullorum disease'. 4
(b) Write down the pathogenesis of 'fowl typhoid'. 2
3. (a) Write down the pathogenesis and postmortem findings of 'coccidiosis' in chicken. 4
(b) What is the relationship of 'necrotic enteritis' and 'coccidiosis'? 2
4. Enlist the disease conditions produced in poultry due to vitamin B and vitamin A deficiency. Describe the conditions produced by vitamin E deficiency in poultry. 6

SECTION-B

5. Briefly describe the pathogenesis and pathology of 'avian influenza'. 6
6. Enlist the diseases cause respiratory problems in poultry. Write down the pathogenesis and pathology of 'CRD'. 6
7. (a) Enlist the neoplastic diseases of poultry. Write down the pathogenesis of 'Marek's disease'. 4
(b) Write a short note on 'histomoniasis' in Turkey. 2
8. Mention the postmortem findings of the following diseases (any four). 4x1.5=6
(i) Duck plague (ii) ND (iii) IBD
(iv) Infectious bronchitis (v) Ascariasis

Chattogram Veterinary and Animal Sciences University
DVM 4th year 1st Semester Final Examination 2022
Course Title: Entrepreneurship and Business Management (Theory)
Course Code: EBM-401
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where questionsno. **1** and **5** are compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer together)

SECTION-A

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|----|-----|---|-----|
| 1. | a) | Define entrepreneur and entrepreneurship development. | 2.0 |
| | b) | Clarify the common myths about entrepreneurs. | 3.0 |
| | c) | Discuss the role of entrepreneurship in economic development of a country. | 3.0 |
| | d) | What are the types of innovation? Discuss with examples. | 3.0 |
| 2. | a) | Illustrate the entrepreneurial process. | 5.0 |
| | b) | Briefly discuss the factors affecting entrepreneurial growth. | 3.0 |
| | c) | Define rural entrepreneurship. Why rural entrepreneurship is needed in Bangladesh? | 4.0 |
| 3. | (a) | What do you mean by organization? Briefly explain the key elements of organizational process. | 5.0 |
| | (b) | Write the importance of organization. | 3.0 |
| | (c) | What principles should be followed in organization? | 4.0 |
| 4. | (a) | Define project and project management. | 2.0 |
| | (b) | Define feasibility study in project management. What are the areas of feasibility study? | 4.0 |
| | (c) | Elucidate the steps involved in project formulation. | 3.0 |
| | (d) | Briefly discuss the sources of finance for a project. | 3.0 |

SECTION-B

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|----|---|--|--------|
| 5. | a) | What is management? Why are managers important for an organization? | 3.0 |
| | b) | Elucidate the basic functions of management. | 4.0 |
| | c) | Distinguish among industry, commerce and trade. | 4.0 |
| 6. | a) | What is planning? Discuss the relationship between planning and performance. | 4.0 |
| | b) | Elucidate the types of planning. | 4.0 |
| | c) | Identify the steps involved in a typical management by objectives (MBO) program. | 4.0 |
| 7. | (a) | Define communication. What are the types of communication? | 4.0 |
| | (b) | Discuss the elements of business environment. | 4.0 |
| | (c) | Define control. Discuss the control process. | 4.0 |
| 8. | Write short notes on any four (4) in the followings | | 4×3=12 |
| | a) Entrepreneurial motivation b) Financing of an enterprises c) Project appraisal techniques
d) Gross margin analysis e) Challenges of women entrepreneurs | | |

Chattogram Veterinary and Animal Sciences University

DVM 4th Year 1st Semester Final Examination 2022

Subject: Avian Medicine (Theory)

Course Code: AVM-401

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 are encouraged to answer together)

SECTION-A

1. a) Enlist the vertically transmitted and immunosuppressive diseases of poultry. 2
b) Prepare a vaccination schedule for a commercial broiler farm. Write the anthelmintic schedule of a commercial layer farm mentioning the drugs available in Bangladesh. 3
2. a) In which viral disease of poultry there may be found visceral gout? Write down its clinical signs and post-mortem findings. 3
b) Mention the role of excessive grain, fish meal and coccidiosis in causing necrotic enteritis in chicken. 3
3. a) What is the relationship between sudden litter change and occurrence of coccidiosis in chicken of age more than 20 days? Give a prescription for a broiler flock affected with cecal coccidiosis. 4
b) Write down the clinical signs and post-mortem findings of Marek's disease. 2
4. a) Which bacterial disease may occur in layer farm due to continuous hot weather? Write down its clinical signs and give a prescription for a layer flock affected with this disease. 4
b) Enlist five immune-modulator drugs with doses commonly used in poultry farm usually after vaccination. 2

SECTION-AB

5. a) Describe the eight steps which may prevent disease outbreak in a poultry farm. 3
b) Write down the etiology, synonyms, clinical signs, post-mortem lesions, diagnosis and treatment of anatispestifer infection in 4-week old ducklings. 3
6. a) Differentiate infectious bronchitis from infectious laryngotracheitis. 2
b) Write down the etiology, synonyms, clinical signs, post-mortem lesions, diagnosis and treatment, prevention and control of duck plague in 2-week old ducklings. 4
7. a) Mention the changes observed in bursa of Fabricius from day 2 to 8 in chicken due to Gumboro disease. 2
b) Write down the clinical signs and post-mortem lesions of Newcastle disease and avian influenza. 4
8. a) Give a prescription for a flock of pullet affected with infectious coryza. 2
b) What lesions will you observe in all avian species due to vitamin A deficiency? 2
c) Write down the etiology, synonyms, clinical signs and post-mortem lesions of goose parvovirus infection in the 1-week old geese. 2

Chattogram Veterinary and Animal Sciences University

DVM 4th Year 1st Semester Final Examination 2022

Subject: Anesthesiology and Operative Surgery (Theory)

Course Code: AOS-401

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 are encouraged to answer together)

SECTION-A

1. a) "Pre-anesthetic considerations are important to get better result in anesthesia"- justify it. 3
b) Define the terms with example- balanced anesthesia, tranquilization, hypnosis, catalepsy, sedative, neuroleptanalgesia. 6
c) Mention the acceptable methods of euthanasia. 2
2. a) State the doses and routes of administering xylazine, ketamine, atropine, thiopentone, propofol and isoflurane in dog. 3
b) Why adrenaline is added to lidocaine for local anesthesia? 3
c) Write down the effects of xylazine and atropine on different body systems of dog. 6
3. a) Mention the site of local anesthetic injection for blocking following nerves- 4
i. Cornual nerve in goat ii. Infraorbital nerve in bull
iii. Mental nerve in dog iv. Sciatic nerve in cow
b) How will you diagnose and treat a patient of toxicity due to local anesthesia? 3
c) Classify breathing circuit. Briefly describe the breathing circuits that are practised during anesthesia in SAQTVH, CVASU. 1+4=5
4. a) Enlist the monitoring tools that are important to observe the stages of anesthesia properly. 3
b) How will you perform CPR for respiratory and cardiac depressed patients? 4
c) Calculate the amount of fluid need to be infused for a 20-kg dog with 5% dehydration. 5
Based on history it has been estimated that the dog vomited 100 ml fluid overnight.

SECTION-B

5. a) Mention the anesthetic protocol that can be used for standing c-section in cow. 3
b) Name 6 (six) drugs that you can use in ruptured tympanic membrane. 3
c) A 300-kg cow was presented to veterinary clinics with the history of anorexia followed by off-feed, distended abdomen for last 10 days and possible consumption of plastic materials from farm. Clinical examination revealed abnormal ruminal parameters. Diagnose the case and describe management procedures to permanently solve the condition. 5
6. a) Mention the age and site of incision for castration and spaying in dog and caponization in fowl. 3
b) Write down the causes and treatment procedure of urolithiasis in goat. 1+3=4
c) What will be your suggestions to the pet owners for softening dental tartar in dog? 2+3=5
How will you treat a cat with acute rectal prolapse?
7. a) Write down the emergency management procedure of epistaxis in bull. 2
b) How will you treat a bitch suffering from pyometra? 5
c) When will you decide to do hernioplasty than herniorrhaphy in calf? Briefly describe the herniorrhaphy surgery in calf. 1+4=5
8. Write short notes (any four): 4×3=12
a) Ophthalmic drugs b) Enucleation in dog c) Aural hematoma
d) Surface anesthesia e) Amputation of hock joint

Chattogram Veterinary and Animal Sciences University

DVM 4thYear 1st Semester Final Examination 2022

Course Title: Animal Welfare and Veterinary Ethics (Theory)

Course Code: AWE-401

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 and 5** is compulsory. Use separate answer script for each section. Fractions of the questions are encourage to answer together)

SECTION-A

1. a) Define animal welfare and animal ethics. What are the basic principles of animal welfare and ethics? 2.5
b) Why animal welfare is important for human well being and health? 2.5
2. a) What are the five freedoms? How would you estimate them? 3
b) The five freedoms are ideal states that are extremely difficult to achieve, justify? 3
3. a) Classify dog populations. How would you control rabies and dog population in Bangladesh? 3
b) Enlist the welfare indicators at the slaughter house. 1
c) How do you assess the farm welfare of a cow at the dairy farm? 2
4. a) How animal welfare and human welfare are connected in between? 2
b) What are the common offences against animals? 2
c) List the veterinary legislation of Bangladesh. 2

SECTION-B

5. a) What are the WOAHA standards on animal welfare? 2
b) Enlist five principles of animal welfare established by farm animal welfare council. 1
c) What is the role of veterinarians to promote animal welfare in Bangladesh? 3
6. a) "An area is affected by an infectious disease"- What steps should be taken by DLS to stop the spread of disease as per Animal Disease Act, 2005? 3
b) What are the poor welfare issues at boiler farm and live bird market? 2
c) Write down the abnormal behaviour of chicken. 1
7. a) What is veterolegal case? How will you perform a post-mortem examination in veterolegal case? 3
b) Write down the common poisons may use to kill a farm animal. Briefly describe the diagnosis process of poisonous cattle for veterolegal action. 3
8. a) What are the poor indicators of welfare of animals? 2
b) What are the causes of penalties under Animal Welfare Act, 2019? 2
c) Why a veterinarian should have adequate knowledge on animal welfare? 2

Chattogram Veterinary and Animal Sciences University

DVM 4th Year 1st Semester Final Examination 2022

Course Title: Veterinary Epidemiology (Theory)

Course Code: VEP-401

Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer **Three (3)** questions from each section, where question no. **5** is compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer together)

SECTION-A

1. a) Differentiate monitoring from surveillance in a tabular form. 2
b) What are the criteria you will follow to prove a factor to be causally associated with the occurrence of an outcome? Describe briefly. 4
2. a) List the types of epidemiological studies with examples in each case. 2
b) Explain confounding variables with examples. 2
c) Define following terms: 2
i. Reference population ii. Source population
iii. Study population iv. Sampling frame
3. a) Write down the relation between test criteria and prevalence of disease in a sheep population. 2
b) Describe Hill's criteria in disease causation. 4
4. a) Define exposure, determinant, outcome and risk factor. 2
b) Suppose you would like to conduct a cross-sectional study to explore the status of mastitis in commercial dairy cows in Chattogram. A previous study suggested 30% prevalence of mastitis in Bangladesh. Calculate a sample size for the planned cross-sectional study. Justify different sampling techniques for your study. What information you like to include in a questionnaire for this study? 4

SECTION-B

5. a) Distinguish the following study pairs: 1
i. Observational vs Non-observational
ii. Descriptive vs Analytical
b) If you are assigned to explore PPR status in goats in Patiya, Chattogram, what kind of study design you will consider? Show in a sketch. 3
c) Differentiate epidemic outbreak from sporadic outbreak of a disease with examples. 1
6. a) Briefly describe "Gold standard test" and "Reference test". 2
b) Interpret the terms: sensitivity- 95%; specificity- 85%; positive predictive value- 40%; negative predictive value- 80% 2
c) Explain the followings: $R < 1$, $R = 1$ and $R > 1$ 2
7. a) A total of 500 cattle are tested to assess the exposure of *Toxoplasma gondii*. Of which, 50 are turned out as positive. Exotic breed has 27 positive (N=250) and indigenous breed has 53 positive (N=250).
i. Construct a 2x2 table 2
ii. Calculate and interpret the strength of association as appropriate. 2
b) Write down the purposes of disease surveillance system. 2
8. a) What are the purposes of a disease outbreak investigation? 1
b) How will you verify a disease outbreak? What information do you need to construct an Epi curve? 3
c) List potential risk factors associated with lumpy skin disease. 2

Chattogram Veterinary and Animal Sciences University

DVM 4th Year 1st Semester Final Examination 2022

Subject: Gynaecology and Obstetrics (Theory)

Course Code: GOB-401

Full Marks: 70, Time: 3 Hours

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SECTION-A

1. a) Describe the importance of Theriogenology in dairy sector of Bangladesh. Who introduced the name 'Theriogenology' and why? 3+1=4
b) Draw a picture of female genital organs of a mare and mark various parts of it. 5
c) Briefly describe luteolysis in regular cyclic animals. 2
2. a) Enumerate the measures should be taken to maximize fertility in repeat breeding syndrome in a dairy farm. 4
b) Describe the process of uterine involution in recently-calved dairy cows. Differentiate lochial discharge from the discharge of septic metritis. 3+3=6
c) Mention the time for estrus, estrous cycle and ovulation in cow, ewe, bitch and mare. 2
3. a) State the utero-ovarian changes in different stages of estrous cycle. List the hormones produced from ovary and placenta. 3+1=4
b) Write down the treatment in following cases: 4×2=8
i. Pyometra in a cow with 300 kg body weight (b. wt.)
ii. Retained placenta in a goat with 40 kg b. wt.
iii. Cystic ovaries in a cow with 300 kg b. wt.
iv. Anestrus in a goat with 45 kg b. wt.
4. a) Write down the causes of uterine prolapse in a cow. How will you correct and manage a cow suffering from uterine prolapse? 2+3=5
b) Make a list of signs of parturient cow and bitch. 4
c) Write down the clinical applications of PGF₂α and oxytocin hormone with their trade names, dose and route in goat. 3

SECTION-B

5. a) Name some obstetrical and gynaecological problems. Give the treatment and management of a cow suffering from dystocia due to over-sized fetus. 3+3=6
b) What are the methods you can apply for diagnosing pregnancy? Describe the chronological procedures of pregnancy diagnosis by rectal palpation. 2+3=5
6. a) Define fertility and subfertility. Mention the managemental form of infertility. 2+4=6
b) What are the data you should record for good management of a dairy farm? Discuss the importance of data recording system in a dairy farm. 3+3=6
7. a) Define silent heat. What are the methods you can apply to detect silent heat? How do you treat silent heat? 1+3+2=6
b) What is delayed ovulation? How will you treat delayed ovulation in a cow? 3
c) Draw an estrous cycle showing follicular wave in goat. 3
8. Write short notes (any four): 4×3=12
a) Estrous synchronization b) Maternal recognition of pregnancy
c) Pseudopregnancy d) Uterine inertia
e) Superfecundation

Chattogram Veterinary and Animal Sciences University

DVM 4th Year 1st Semester Final Examination 2022

Course Title: Farm Animal Medicine (Theory)

Course Code: FAM-401

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 are encouraged to answer together)

SECTION-A

1. a) What are the possible risk factors of mastitis in farm animal of Bangladesh? 2
b) Write down the line of treatment of coliform mastitis in a cow with body weight about 300 kg. What will be your strategy to control mastitis in a commercial dairy farm? 3+3=6
c) Mention the changes in milk and glandular tissues you will observe in a cow with mastitis. 3
2. a) Write down the importance of soil-borne diseases in Bangladesh. State the predisposing factors and pathogenesis of bacillary hemoglobinuria in cattle. 3+4=7
b) What are the control strategies you will adopt to control soil-borne diseases in your Upazilla? 3
c) Mention the mode of transmission of foot and mouth disease (FMD) virus. What are the serotypes of FMD virus prevail in Bangladesh? 2
3. a) Write down 4 (four) important zoonotic diseases causing abortion in ruminants with their causal agents. Mention diagnostic procedures of the disease causing "storm of abortion" in a commercial dairy farm. 2+4=6
b) State the causal agent, clinical signs, treatment and control strategy of hemorrhagic septicaemia (HS) in buffalo in coastal areas of Bangladesh. 6
4. a) Distinguish between ephemeral fever and black quarter in cattle. 3
b) What are the clinical signs of cystitis in cow and how will you diagnose the disease? Write down the line of treatment of balanoposthitis in bull. 3+3=6
c) Describe briefly about lumpy skin disease. 3

SECTION-B

5. a) What is PPR? Differentiate PPR from rinderpest. 1+3=4
b) Describe the epidemiology and diagnosis of tetanus in goat. 4
c) Write down the complications and line of treatment of FMD in cattle. 3
6. a) A 30-kg buck is suffering from fever (105°F) and anorexia. Clinical examination revealed the formation of scab in the muco-cutaneous junction of oral commissure. What is your tentative diagnosis? Write a prescription for this buck. 4
b) Write down the pathogenesis and zoonotic significance of bovine anthrax. 4
c) How will you diagnose leptospirosis in farm animal? 4
7. a) Explain the source of infection and transmission dynamics of bovine viral diarrhea in cattle. 4
b) Describe the epidemiology and control strategy of rabies in farm animal. 4
c) State different clinical stages of paratuberculosis in farm animals. 4
8. a) Write down the line of treatment of infectious keratoconjunctivitis in goat. 4
b) Correlate the clinical findings of dermatophilosis with its pathogenesis. 4
c) Write down the etiology and diagnosis of tuberculosis in farm animal. 4

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2022
Course Title: Preventive Veterinary Medicine (Theory)
Course Code: PVM-401
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **three (3)** questions from each section where question number **1 and 5** are compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer together.)

SECTION-A

1. a) Define and classify surveillance. 2
b) What are the objectives for surveillance? 3
c) How risk analysis is made for surveillance? 6

2. a) Define emerging and re-emerging diseases with examples. 2
b) What are the trans-boundary animal diseases of category A specified by WOAHA (formerly OIE)? 3
c) Describe the contingency plan to control any trans-boundary disease. 7

3. a) Mention 10 (ten) important zoonotic diseases in Bangladesh. 2
b) Explain all the components of biosecurity in a dairy farm. 10

4. a) Explain 'sensitivity' and 'specificity' of any diagnostic test. 2
b) Differentiate 'screening test' and 'diagnostic test'. Enumerate the characteristics of an ideal 'screening test'. 2+8=10

SECTION-B

5. a) Define vaccine and vaccination. Enlist the vaccines available for livestock and poultry manufactured by Livestock Research Institute (LRI), Bangladesh. 4
b) Prepare a vaccination and deworming schedule for a commercial layer farm. 4
c) Discuss the factors responsible for a successful vaccination campaign. 3

6. a) What is vector-borne disease? Enlist the vector-borne diseases of veterinary importance. 3
b) Discuss the transmission and control measures of lumpy skin disease (LSD) in Bangladesh. 5
c) How will you measure the presence of tuberculosis and brucellosis in a dairy herd? 4

7. a) Write a comprehensive plan to prevent mastitis. 2
b) Briefly explain the importance of 'one health approach' for the prevention and control of anthrax. 4
c) What is veterinary emergency? Briefly explain the emergency plan. 1+5=6

8. Write short notes on the followings (any three): 3X4=12
 - (i) Quarantine
 - (ii) Rabies control in Bangladesh
 - (iii) Eradication of diseases
 - (iv) Control of Nipha virus encephalitis