

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2023
Course Title: Avian Pathology
Course Code: 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 number 1 compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer together.)

SECTION-A

1. a) Enlist the poultry diseases caused by bacteria, virus and fungus up to 60 days of age. 2
b) Write down the causes and pathology of necrotic enteritis and coccidiosis in broiler. 3
2. a) Describe the ways in which T cells are important for host defense against viruses in poultry. 3
b) In which viral disease visceral gout is commonly found? Write down the pathogenesis and pathology of that disease. 3
3. a) Write down the pathognomonic lesions of the following diseases. 3×1=3
i) Aspergillosis
ii) Marek's disease
iii) Polyneuritis
b) Write down the pathogenesis and pathology of fowl typhoid. 3
4. a) Which one is the most common viral disease of adult duck? Write down its pathogenesis and pathology. 3
b) Write short note on histomoniasis in turkey. 3

SECTION-B

5. a) Mention the postmortem findings of fowl cholera. 2
b) Describe the different forms of colibacillosis. 4
6. a) Enlist the immunosuppressive disease and vertically transmitted disease of chicken. 2
b) Write down the pathogenesis and pathology of Newcastle disease in chicken. 4
7. a) Write down the lesions of common mycotoxicosis in poultry. 2
b) Mention conditions with lesions produced in chickens due to deficiency of vitamin-E. 2
c) What are the causes of stargazing, curled toe paralysis and nutritional roup in chicken? 2
8. Write down the postmortem findings of the following disease (any four). 1.5×4=6
a) Infectious bursal disease
b) Avian influenza
c) Infectious coryza
d) Psittacosis
e) Duck viral hepatitis

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2023
Course Title: Preventive Veterinary Medicine
Course Code: PVM-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 number 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

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|----|----|--|-------|
| 1. | a) | Define prevention and control of a disease. | 2 |
| | b) | Define surveillance. Explain the differences between active surveillance and passive surveillance. | 1+4=5 |
| | c) | Classify disease transmission with examples. | 4 |
| 2. | a) | Define transboundary and notifiable diseases with examples. | 2 |
| | b) | Briefly discuss the direct and indirect methods of disease control. | 4 |
| | c) | Construct a vaccination schedule for a sonali chicken farm and for a dairy farm. | 6 |
| 3. | a) | Mention the differences between biosecurity and biosafety. | 2 |
| | b) | Briefly discuss the application of biosecurity in different production groups of broiler and layer birds. | 6 |
| | c) | State the differences between screening and diagnostic test. What do you understand by ring and blanket vaccination program? | 2+2=4 |
| 4. | a) | Define vaccine. How do you differentiate killed vaccine from live vaccine? | 1+2=3 |
| | b) | Write down the name, route, dose and storage of vaccines produced by LRI for livestock and poultry in Bangladesh. | 5 |
| | c) | What is causation of disease? Discuss the factors responsible for vaccine failure. | 2+2=4 |

SECTION-B

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|----|--------------------------------|--|--------------------------------------|
| 5. | a) | Write down the application of "One Health approach" in prevention and control of zoonotic diseases. | 6 |
| | b) | Enlist the managerial measures to prevent mastitis in a dairy farm. Briefly describe the risk zones in controlling FMD outbreak. | 2+3=5 |
| 6. | a) | Define sensitivity and specificity of a diagnostic test. Write down the procedures of brucellosis screening in a dairy farm. | 2+5=7 |
| | b) | Illustrate the prevention and control measures of insect borne diseases of animals in Bangladesh. | 5 |
| 7. | a) | Define quarantine. Discuss the relationship between rabies virus shedding and quarantine of dogs. | 1+4=5 |
| | b) | Define herd health. Briefly describe the steps of herd health in planning a dairy farm. | 1+4=5 |
| | c) | Explain the term 'emergency preparedness'. | 2 |
| 8. | Write short notes (any three): | | 3×4=12 |
| | a) | Transboundary disease control | b) LSD control in Bangladesh |
| | c) | Avian influenza control in Bangladesh | d) Emerging and re-emerging diseases |

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2023
Course Title: Anesthesiology and Operative Surgery (Theory)
Course Code: 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 number **1 and 5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) Define anesthesia, analgesia, euthanasia and hypnosis. Mention the general principles of anesthetic management in animals. 2+2=4
b) "General anesthesia (GA) is not commonly used in ruminants"- explain the reason. 3
c) Describe the stages of GA. Why is GA essential for small animal surgery? 2+2=4

2. Describe the anesthetic technique for the following surgical conditions: 4×3=12
a) Extirpation of eyeball in a horse b) Anal sacculectomy in a bitch
c) Castration in a kid d) Amputation of tail in a cow

3. a) Explain the importance of premedication, induction, maintenance, emergence and recovery phases in veterinary anesthesiology. 4
b) Enlist the doses and routes of administration of xylazine, ketamine, pethidine and thiopentone in dog & cat. 4
c) Mention the principal points, caution and treating emergencies for neuroleptanalgesics in animals. 4

4. a) How will you do anesthesia of a cat with isoflurane in our hospital? 5
b) What are the advantages of using muscle relaxants? Mention 3 commonly used muscle relaxants with their doses in small animals. 1+3=4
c) Describe the hazards of anesthesia with their clinical management in veterinary practice. 3

SECTION-B

5. a) Define veterinary surgery. Why is it so important for field practitioners? 1+2=3
b) "Eye position, pupil size, corneal reflex and pupillary light responses indicate anesthetic depth"- explain it. 3
c) How will you perform rumenotomy in a dairy cow that has a history of excessive feeding of leguminous plants? 5

6. a) Classify hernia with examples. Draw the different parts of a typical hernia. 2+2=4
b) Is umbilical hernia painful? How do you treat an umbilical hernia in a calf? 1+5=6
c) Define glaucoma, cherry eye, trichiasis and strabismus. 0.5×4=2

7. a) Enlist the common surgical conditions of teats and udder. Mention at least four general considerations for teat surgery. 2+2=4
b) Why spaying is important for bitch. How do you perform spaying in an adult bitch? 1+4=5
c) Mention the causes, clinical signs and treatment of otorrhea in a dog. 3

8. Write short notes (any four): 4×3=12
a) Disbudding and dehorning in cattle b) Aural hematoma in a dog
c) Dermoid cyst in a calf d) Atresia ani in a newborn calf
e) Physical method of euthanasia

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2023
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 number 5 is compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) Define endemic, epidemic and pandemic with examples. 3
 b) Write down the formula to calculate attack rate. There are total 275 cows and 30 calves in 10 cattle farms in Sitakunda upazilla. Among them, 45 cattle subsequently developed diarrhea in last 15 days. Calculate the attack rate of diarrhea. 1+2=3
2. a) Define odds and odds ratio. Write down the interpretation of following estimates: 1+3=4
 i. OR=1 ii. OR=2.5 iii. OR=0.4
 b) Differentiate case fatality rate from mortality with examples. 2
3. Lumpy skin disease (LSD) is reported in cattle in Bangladesh since 2019. There are different patterns of LSD. Answer the following questions based on this background-
 a) Write down different distribution of LSD and briefly describe them. 2
 b) Identify the infectious disease pattern of LSD and define them. 3
 c) List the potential risk factors associated with LSD. 1
4. a) In a vaccine trial, 100 animals get anthrax vaccine and 100 animals get placebo. Among the vaccinated animals, 5 animals get sick and among the non-vaccinated animals, 25 animals become sick. Calculate the vaccine efficacy with interpretation. 4
 b) Explain the spatial and temporal distribution of infectious disease. 2

SECTION-B

5. COVID-19 outbreak caused huge morbidity and mortality in humans across the world.
 a) Write appropriate measures of infectiousness of COVID-19 with conditions. 2
 b) Interpret the following: $R_0 = 1$, $R_0 < 1$ and $R_0 > 1$ 1
 c) If R_0 of COVID is 4, then calculate and interpret "Herd immunity threshold". 2
6. A national PPR control program is being planned to implement. However, before launching the program DLS likes to know the status of PPR in goats in Bangladesh.
 a) Select an appropriate epidemiological study design and describe in sketch form. 3
 b) Distinguish your chosen study from other major epidemiological studies. 2
 c) List the biases of your chosen study and how will you deal with those? 1
7. a) Define landscape epidemiology. What types of information are required to describe landscape epidemiology? 1+1=2
 b) What is surveillance? Write down the steps of outbreak investigation. 1+3=4
8. You are assigned to assess the effect of potential factors of FMD in cattle.
 a) How will you assess the effect of each factor on FMD in cattle? Briefly describe. 3
 b) What do you mean by 'relative risk'? 1
 c) Distinguish between 'attributable risk' and 'population attributable risk'. 2

Chattogram Veterinary and Animal Sciences University
DVM 4th Year 1st Semester Final Examination-2023
Course Title: Gynecology and Obstetrics (Theory)
Course Code: GOB -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 number **1 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 use, dose, composition, route, contraindication and trade name with vial size of following hormones- GnRH, FSH, LH, PGF₂ α , Oxytocin, P₄ and E₂. 7
- b) Sketch the diagram for the development of conceptus from oogenesis to implantation. 4
2. a) Mention the time of estrus, estrus cycle and ovulation in cow, doe, ewe, sow, bitch and mare. 3
- b) Describe the follicular wave in dairy cows. Briefly explain the ovulation process. 3+2=5
- c) What do you mean by meta-oestral bleeding in cows? List the hormones produced from ovary, placenta and uterus. 2+2=4
3. a) Enumerate the measures should be taken to maximize the fertility in repeat breeding syndrome in a commercial dairy farm. 5
- b) Summarize the diseases under gynecology and obstetrics. Differentiate lochial discharge from the discharge of septic metritis. 2+2=4
- c) What are the pregnancy recognition factors of cow, mare, sow, doe, women and ewe? 3
4. Write down the treatment of following cases: 6 \times 2=12
 - a) Septic puerperal mastitis in a cow (300 kg)
 - b) Pyometra in a bitch (22 kg)
 - c) Vaginal prolapse in a goat (50 kg)
 - d) Cystic ovary in a cow (250 kg)
 - e) Chronic endometritis in a cow (350 kg)
 - f) Anestrus in a goat (40 kg)

SECTION-B

5. a) Describe the findings of rectal palpation in a cow for estrus, pyometra, pregnancy, anestrus, COD, mummified fetus, diestrus. 7
- b) Explain the procedures to manage various types of dystocia in cow. 4
6. Prescribe the treatment of following conditions: ring womb, uterine inertia, retained placenta, postpartum hemorrhage, abortion, pseudopregnancy. 6 \times 2=12
7. a) Enlist the ultrasonographic image findings for pregnant and pseudopregnant doe. 3
- b) Briefly describe the diagnosis and correction of vertex posture and dog sitting position. 4
- c) Define fertility and infertility. Write down the causes of infectious forms of infertility in dairy cows. 2+3=5
8. Write short notes on (any four): 4 \times 3=12
 - a) White heifer disease
 - b) Superovulation
 - c) Estrus synchronization
 - d) Schistosoma reflexus
 - e) Breeding soundness of a cow

Chattogram Veterinary and Animal Sciences University

DVM 4th Year 1st Semester Final Examination 2023

Course Title: Farm Animal Medicine (Theory)

Course Code: 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 number 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions are encouraged to answer.)

SECTION-A

1. a) 'Lumpy skin disease (LSD) is an economically important disease in Bangladesh'-justify the statement. 4
b) Mention the risk factors and mode of transmission of LSD. 3
c) Explain the complications of FMD in farm animals. Enlist the name and doses of vaccines available in Bangladesh against LSD & FMD. 2+2=4
2. a) A 500 kg body weight buffalo cow having body temperature 105°F, respiratory distress, swollen throat & dewlap. What is your presumptive diagnosis? Write a prescription with advice to control the disease. 5
b) How will you differentiate between black quarter and ephemeral fever in field condition? 3
c) Why diarrheal disease is a managerial disease? How will you prevent diarrheal disease in commercial farms? 2+2=4
3. a) A bull weighing 400 kg BW shows body temperature 104°F, one side of mandible is swollen, hot & painful. What is your presumptive diagnosis? Write down the prescription with advice. 5
b) Mention the clinical manifestations of rabies in farm animals. How can rabies be prevented in farm animals? 2+2=4
c) How will you design a general control plan against soil-borne diseases? 3
4. a) How will you differentiate between abortion caused by brucellosis and leptospirosis in a dairy farm? 4
b) What are the measures to be implemented in controlling zoonotic diseases in commercial dairy farms? 4
c) State the line of treatment and control measures of puerperal metritis in a cow. 4

SECTION-B

5. a) Write down the strategies of treating grade II clinical mastitis. 3
b) Mention the instances when you need to do subclinical mastitis test. 2
c) Write down the dry off procedure of both "5 lit milk/day" and "12 lit milk/day" cows. 3+3=6
6. a) What is strangles? Discuss the clinical findings & line of treatment of strangles. 1+3=4
b) Describe the epidemiology and clinical findings of dermatophilosis in cattle. 4
c) Describe the etiology, epidemiology, clinical & laboratory diagnosis of orf in goat. 4
7. a) Summarize the diseases caused by *Clostridium perfringes* in farm animals. 4
b) Write down the differential diagnosis of tetanus from similar diseases. 4
c) Compare the clinical findings of red nose disease and malignant catarrhal fever. 4
8. a) Write a short note on navel ill in calf. 4
b) What are the risk factors of infectious bovine keratoconjunctivitis (IKC)? Write down the line of treatment of stage II IKC. 2+2=4
c) Discuss the pathogenesis and clinical findings of Johne's disease in cattle. 4

Chattogram Veterinary and Animal Sciences University
DVM 4th year 1st Semester Final Examination-2023
Course Title: Animal Welfare and Veterinary Ethics
Course Code: AWE-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 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) Describe the common welfare issues at an intensively managed dairy farm. 3
b) Differentiate between “Animal rights view” and “Species integrity view” in a tabular manner. 2
2. a) Shortly describe 10 common unethical practices that shouldn’t be done by a practicing vet. 4
b) Enlist the services that Para-vets can provide according to the “BVC-Act, 2019. 2
3. a) A few months ago, “Saint Martin” authority started to move the dogs from this Island to mainland. Under which law this procedure is illegal and what will be the punishment of it. 4
b) Enumerate the principles of veterinary ethics. 2
4. a) Mention the critical point of welfare during cattle handling and transport. 2
b) What are the duties of meat inspector at the slaughterhouses? 2
c) Mention the ways by which animals express pain. 2

SECTION-B

5. a) How will you ensure 5 freedoms for farm animals? 2
b) Briefly discuss about One Health, One Welfare and One Biology. 2
c) How will you assess attitude and behaviour of farming staff at dairy farm? 2
6. a) Which animals feed products are banned to be imported in Bangladesh? Enlist government approved labs that detect the contrabands. 2
b) Sketch the process of sending a feed sample “from custom office to a lab” to test the contrabands. 2
c) Enlist the actions can not be included as “Unnecessary cruelty to animals” according to the “Animal Welfare Act- 2019”. 2
7. a) To develop a new IBD vaccine, CVASU has taken a research project at the “Research and Farm Based Campus, Hathajari”. For this project layer chickens will be reared from DOC stage until 5 weeks of age. Now, describe the checklists to ensure the welfare of those birds. 4
b) Describe the importance of animal welfare in the day to day practice of a veterinarian. 2
8. a) How will you assess fear of animals? Write the relationship between fear and production in farm animals. 1+2=3
b) What is the humane end point of laboratory animals? 1
c) What are the welfare problems of broiler in Bangladesh? 2

Chattogram Veterinary and Animal Sciences University
DVM 4th year 1st Semester Final Examination-2023
Course Title: Entrepreneurship Development and Business Management (Theory)
Course Code: EBM-401 (T)
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer four (4) questions from each section where question number 1 and 5 are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together.)

SECTION-A

1. a) Define business and agribusiness. Classify manager by level and areas. Briefly discuss the principles of management process. 1+1+3=4
 b) Discuss the scope of agribusiness in Bangladesh. 5
 c) What are the challenges and opportunities of agribusiness in livestock enterprise in Bangladesh? 2

2. a) Define planning. Write down the needs of planning in business. 1+3=4
 b) Briefly discuss the steps involved in the planning process. 5
 c) Explain the motives of inventory management. 3

3. a) What is an enterprise? Discuss the key characteristics of an enterprise. 4
 b) Elaborate the problems that an enterprise is likely to be an encounter. 5
 c) Discuss about sole ownership. 3

4. a) What do you mean by controlling? Explain the needs for controlling in any business enterprises. 1+3=4
 b) Discuss the different steps involved in the business control process. 5
 c) What kinds of function performed by a manager under directing process? 3

SECTION-B

5. a) Distinguish between: (i) Entrepreneur and entrepreneurship (ii) Manager and administration (iii) Entrepreneurial growth and motivation iv) Trade and commerce 4×1=4
 b) Briefly discuss the functions of the entrepreneur in context of Bangladesh. 5
 c) State the limitations of women entrepreneurs. 2

6. a) Explain the factors enhancing the entrepreneurial growth in SME sector in Bangladesh. 4
 b) Define entrepreneurial competency. Describe the importance of entrepreneurial competencies of an organization. 1+4=5
 c) Give an overview of core competencies in an entrepreneurship. 3

7. a) Discuss the factors that are responsible for entrepreneurial mobility. 4
 b) Define financing. Write down the sources of essentials and sources of financing of an enterprise. 1+4=5
 c) Distinguish between share and debenture. 3

8. Write short notes (any four) to the followings: 4×3=12
 a) Human Resource (HR) management process b) Business plan
 c) Total quality management (TQM) d) Maslow's need hierarchy theory
 e) Organizational structure and design