

Department of Animal Science and Nutrition
Chattogram Veterinary and Animal Sciences University
MS in Animal and Poultry Nutrition
Semester Final Examination (July-December 2023)
Course Title: Ruminant Nutrition (Theory)
Course code: RNT-602, Full marks: 40, Time: 2 hours

Figures in the right margin indicate full marks. Answer any four (4) questions. All questions must be answered chronologically!

1. How do feed factors intrinsically regulate rumen kinetics and microbial community trends? What are the consequences of fiber type and roughage to concentrate ratio on dynamics of rumen environment? 10.0
2. What factors should you consider to ensure optimization of fiber utilization in ruminant animals? How do type and quantity of dietary fiber for ruminant animals interfere the public health issues? 10.0
3. Is there any connection among sub-acute ruminal acidosis (SARA), acute ruminal acidosis (ARA), chop length and $peNDF$ content of a dairy ration? How do SARA turn to ARA? How does ARA provoke sub-clinical lameness in crossbred dairy cows? 10.0
4. Under which specific circumstances feeding of UDP rich supplements is truly a noble approach? Do you think supplying RDP in ruminants is simply a wastage? How should you optimize availability of dietary nitrogen in the ruminant animals? 10.0
5. Is forage dietary essential for ruminant animals? How should you formulate least cost ration for the crossbred commercial dairy cattle of Bangladesh? Which feeding system is most appropriate for them? 10.0

Department of Animal Science and Nutrition
Chittagong Veterinary and Animal Sciences University
MS in Animal and Poultry Nutrition
Semester Final Examination (July-December 2023)
Course Title: Forage Production and Grassland Management (Theory)
Course code: FGM-602, Full marks: 40, Time: 2 hours

Figures in the right margin indicate full marks. Answer any four (4) questions. All questions must be answered chronologically!

1. Do green forages and grasslands explore inevitable framework for sustainable dairy farming? How do green forages nutritionally differ from hay, straw and stover? How should you proceed to evaluate grassland as a sole source of forage for lactating dairy cows? 10.0
2. Do you feel pasture is economically viable under Bangladesh perspective? How does pasture management make sense? Discuss the management procedure of perennial, rotation and irrigated pasture under Bangladesh perspectives? 10.0
3. How should you conserve grassland in Bangladesh? Discuss the ways of improving grassland under tropical environment. How should you relate soil conservation and grassland management? 10.0
4. Do you think that storage and preservation of green grasses are really important in Bangladesh? Discuss the most applicable methods for preservation of green forages under sustainable farming condition in Bangladesh. 10.0
5. Discuss the importance of non-conventional forages for small scale dairy farms. Do you feel that they are really prospective for large scale commercial dairy farms? Suggest a national policy for substantial use of non-conventional forages in Bangladesh. 10.0

Chittagong Veterinary and Animal Sciences University
Department of Animal Sciences and Animal Nutrition
M.S. in Animal and Poultry Nutrition
Semester final examination July December-2023
Sub: Animal Products in Human Nutrition (T)
Full marks-40: Time: 2 Hours

Answer any four questions from the following

1. a) Mention about the importance of animal products in human nutrition. 5
b) Write down the status of animal products present, past and future. 5
2. a) Describe about the meat and meat products for human consumption. 5
b) Write down the role of meat and meat product with their bad effect. 5
3. a) Describe about the essential amino acids and Cholesterol for human health. 5
b) Mention about the saturated and unsaturated fatty acids for human health. 5
4. a) Mention about the nutritional requirement of human with different age group. 5
b) Indicate the diet chart for adult male and female with average body weight. 5
5. a) Indicate the name of milk and egg products available in Bangladesh. 5
b) Mention about the importance of milk and egg products with their bad effects. 5

MS in Animal and Poultry Nutrition Final Examination
July to December Semester-2023
Sub: Lab, Pet and Wild Animal Nutrition
Course code: LPW-602
Marks: 40 Time: 2 hours

(Answer any four questions from the following in which Q no 1 is compulsory. Figure in the right margin indicates full marks)

1. a. Indicate and discuss briefly the component of feed for dog and cat. 5.0
b. Classify dog food based on nutrient content and discuss on it. Write down about the feeding system of pregnant dog, pups and injured dog. 5.0
2. a. Write down about different category of feeding of dog and cat. Mention the nutrient requirement of dog and composition of homemade food for dog/cat. 5.0
b. Discuss briefly about the natural ingredient diet and chemically pure diet. 5.0
3. a. Write down about the feeding management of Rabbits and Mice. 5.0
b. Indicate the nutrient requirement and diet composition of Guinea pig. 5.0
4. a. Indicate the purpose of Animal captivity? Mention the characteristics of captive Animal diet and discuss in brief about the diet of Tiger, Leopard and Zebra in captive condition. 5.0
b. Indicate the specialized diets for certain species and discuss about common nutritional disorder of carnivores. 5.0
5. Write short notes on (Any two) : 5.0×2 =10
 - a. Gavage feeding
 - b. Obesity of dog
 - c. Post-operative diet of cat

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M S in Animal and Poultry Nutrition

July- December Semester Final Examination 2023

Course Title: Nutrition and Reproduction

Course Code: RPN-602

Total marks: 40

Time: 2 hours

Answer any **2 (two)** questions from the following. Values are indicated in the right margin in each question.

1. a) Nutrient plays an essential for successful reproduction of cow – Justify. **4.0**
b) Formulate a ration for a late pregnant 2 years old lactating cow having 310 kg live weight and daily weight gain of 225g and the cow produces 10 liters milk daily. **12.0**
c) Draw a neat diagram of the reproductive system of a doe. Indicates the physiological functions of each part. **4.0**

2. a) Describe the BCS which are the important for breeding cows and bulls. **5.0**
b) Describe the biological framework those determine the cows herd fertility. **8.0**
c) What is feeding standard? List the feeding standard those are used for ration formulation for cow? Describe a feeding standard with its' advantages and disadvantages. **7.0**

3. a) What is milk? Briefly write the causes of variation in the yield and composition of milk from cow. **5.0**
b) Describe the breeding and post breeding management of a breeding bull. **5.0**
c) Narrate a ration for a 3.5 year-old bull having 700 kg live weight and dairy live weight gain is 250 g, which is using semen collection twice per week for artificial breeding and the ejaculate volume is 10 ml. **10.0**

MS in Animal and Poultry Nutrition Final Examination

July to December Semester-2023

Sub: Avian Nutrition

Course code: AVN-602

Marks: 40 Time: 2 hours

(Answer any four questions from the following in which **Q no 4** is compulsory. Figure in the right margin indicates full marks)

1. a. Define feed additives? Lists commonly used feed additives and discuss briefly three of them with its functions. 5.0
- b. Why Mineral and Vitamin requirement is important in poultry diet? Indicate the deficiency symptom and sources of Ca, P, Vit A, Vit E, Vit D and salt (NaCl) in poultry. 5.0
2. a. What do you mean by vitamin stability? Discuss the factors that affect the stability of vitamin. 5.0
- b. Discuss briefly about the phase feeding, restricted feeding and forced feeding in poultry. 5.0
3. a. Indicate the possible ways of contamination of Animal feed. Write down the major toxin and its producing agent, favorable environment, sources and effects in animal body. 5.0
- b. Indicate the nutrient requirement of starter and finisher Guinea fowl and Ostrich and discuss the specific feeding habit of them. 5.0
4. a. Indicate the effects of temperature, water & diet on egg production of Avian. 5.0
- b. Discuss briefly feeding program of duck and pigeon. 5.0
5. Write short notes on (Any two): \rightarrow 5.0×2 =10
 - a. Factors that affect water intake of Avian
 - b. Anti-nutrient
 - c. Nutrient Management under adverse environment