

Department of Animal Science and Nutrition
MS in Animal and Poultry Nutrition
Semester Final Examination 2019
Semester: July-December 2019
Subject: Animal Products in Human Nutrition (APN-602)

Answer to the following questions (Any Four). Figures in the right margin indicate full marks.

Full marks: 40

Time: 2 hour

1. a) What factors should we consider for assessing nutrients requirements of a human being? Mention the nutrition requirements for babies and young children. 5.0
b) Explain the importance of omega-3 and omega-6 fatty acid for human health. 5.0
2. a) Mention the nutrient value of eggs with its composition. Write down the health benefits of egg for infants. 5.0
b) Why meat is important for infants? Shortly describe the health benefits of meat for infants. 5.0
3. a) Differentiate between lipids and phospholipids. State the role of phospholipids in the body. 5.0
b) Describe the importance and adverse effect of cholesterol. How can you recommend elderly people to control cholesterol level in their body? 5.0
4. a) Briefly describe about the types and functions of fatty acid. Write down the adverse effect of fatty acids. 5.0
b) Describe about the essential amino acids, it's function and doses for human body. 5.0
5. a) List out the hormones that are usually used in animal production. How can you describe it's health hazard and possible recommendation as alternative in animal production. 5.0
b) Describe the residual effects of antibiotics on human health. 5.0

-----Good luck-----

MS in Animal and Poultry Nutrition Final Examination

July to December Semester 2019

Course Title: **Forage Production and Grassland Management**

Course Code: **FGM - 602**

Total Marks: 40, Time: 2 hours

Answer any **FIVE (05)** from the following questions (5 x 8) = 40

1. a) Define silage? Discuss how silage is formed in controlled fermentation. 4
b) Discuss about conservation of forages with its importance in dairy farming. 4
2. a) What is fodder? Briefly discuss about management of forages. 4
b) What is pasture? Briefly discuss the management process of grazing system. 4
3. a) Define grassland with its types and management procedures. 4
b) Differentiate grassland and pasture with their importance in dairy farming. 4
4. a) Define NCFR with its types and importance. 4
b) Discuss the constraints of using NCFR with the detoxification methods of any three ingredients. 4
5. a) Discuss forage vs. fodder. List some common fodder available in Bangladesh. 4
b) What is forage? Why do you use forage to feed animal for profitable dairying? 4
6. a) What do you do for intercultural operation to produce Napier grass? 4
b) Briefly discuss about mulching as an intercultural operation to produce maize. 4

MS in Animal and Poultry Nutrition Final Examination

July to December Semester/2019

Sub: Avian Nutrition

Course code: AVN-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. What do you mean by Phase and force feeding? Why Phase feeding is important in poultry rearing and how will you maintain this feeding system? 3.0
b. What do you mean by anti-nutrient component in poultry feed? Classify it. Discuss briefly the nature, source and removal/elimination techniques of Saponin, Gossypol, Tanin, cyanogenic glycosides, Antiproteins from feed. 7.0
2. What are possible ways of contamination of Avian feed? List the major fungal contaminations in feed and mention their sources and effect on animal body. 10.0
3. a. Mention the factors that affect feed intake and feed efficiency of Avian. 4.0
b. What are the points we should need to consider during ration formulations? Write down the feeding management and nutrient requirement for Quail, Pigeon, Duck and Guinea fowl. 6.0
4. a. Write down about nutrient management of poultry under adverse environment. 5.0
b. Mention the common embryo deficiency symptom for vitamin and indicate their possible way of prevention. 5.0
5. Write short notes on (Any Four) 2.5x4 =10
 - a. Feeding management of Ostrich and Pheasant.
 - b. Water metabolism.
 - c. Deficiency symptom of salt, calcium and manganese in poultry.
 - d. Factors affecting Vitamin Stability.
 - e. List the non-Nutrients compound and their beneficial and adverse effect.

Department of Animal Science and Nutrition
Chittagong Veterinary and Animal Sciences University
MS in Animal and Poultry Nutrition
Semester Final Examination (July-December 2019)
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. 'Rumen Environment'- How do you feel they like, static or dynamic? 10.0
Which factors regulate them? What are the consequences of roughage to concentrate ratio on dynamics of rumen environment?
2. Discuss the mode of utilization of ADF, NDF, eNDF and peNDF for adult ruminants? 10.0
What are the factors you should consider to ensure optimization of fiber utilization in ruminants? How do dietary fibre for ruminants interfere public health?
3. Is there any association among sub-acute ruminal acidosis (SARA), acute ruminal acidosis (ARA), chop length and eNDF content of a dairy ration? 10.0
Why do SARA turns to ARA? How do ARA provoke sub-clinical lameness in crossbred Friesian cows?
4. Under which specific circumstances supplementation of UDP is truly a noble approach? 10.0
Is there any way to ignore RDP irrespective of milk yield and productivity in ruminants? Summarize the strategy to optimize availability of dietary nitrogen in ruminants.
5. 'NRC or ARC or Thumb rule' which one is really a noble approach 10.0
under current perspective of Bangladesh? Which feeding system would be most applicable for high yielding crossbred dairy cows for commercial dairy farms in Bangladesh?

MS in Animal and Poultry Nutrition Final Examination

July to December Semester 2019

Course Title: **Lab. Pet and Wild Animal Nutrition**

Course Code: **LPW -602**

Total Marks: 40, Time: 2 hours

Answer any **FOUR (04)** from the following questions (4 x 10) = 40

1. a) Write down the name of different types of diets with example. 5
b) Define Diet with its step of formulation for lab and pet animals. 5
2. a) Write short notes on common nutritional problems of a zoo. 5
b) Mention different types of pet food products and discuss them. 5
3. a) Briefly discuss any three forms of diets for the pet animals. 5
b) What is feed? Discuss the feeding regimes for different categories of dog. 5
4. a) What is cat feeding? How do you plan to feed your sick cat? 5
b) Mention the feeds that are restricted for cat with cause of restriction. 5
5. a) What do know about the adverse environmental condition in feeding wildlife? 5
b) How do you manage the nutrition of wild animal under adverse temperature? 5