

Department of Animal Science and Nutrition
Chittagong Veterinary and Animal Sciences University
MS in Animal and Poultry Nutrition
Semester Final Examination (July-December 2015)
Course Title: Animal Products in Human Nutrition (Theory)
Course code: APN-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. "Animal products have a valuable contribution in human nutrition"- Justify the statement with suitable logics and explanations. Explain how phospholipids play important role in brain development. 10.0
2. "The strategies of meat production and processing in recent days are far different from previous"- Justify the statement considering human health and consumer desire. What are the criteria required to fulfill the quality of an organic meat? 10.0
3. Criticize red meat considering the effects on human health. Explain when and how red meat becomes carcinogenic for human. What are the possible ways to prevent the carcinogenic effect of red meat? 10.0
4. Write down the general and specific effects of 'hormonal residues in animal products' on human health. "Low level of antibiotics for long duration in food items can develop antibiotic resistance"- explain the statement with specific mechanism. 10.0
5. Write down the pathways of cholesterol synthesis and its essential functions in human body. Explain when and how cholesterol becomes dangerous for life. What will be your opinion on increasing the ratio between omega-6 and omega-3 fatty acids in the human diet? Should you consider it as a wise or worse decision? 10.0

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Semester Final Examination (July-December 2015)
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 microbes'- How do you feel they like, static or dynamic? 10.0
Which factors regulate them? What are the consequences of gradually manipulating forage to concentrate ratio or vice versa on dynamics of rumen microbes?
2. Under which specific circumstance supplementation of UDP is truly 10.0
a noble approach? 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.
3. 'Fiber fermentation in the rumen'-Havoc or breakthrough? What are 10.0
the premium factors you do need to consider to ensure optimum fiber utilization in ruminants? How and when fibre fermentation is impaired by dietary protein level?
4. 'Protecting fat for ruminants'- wise or absolutely nonsense idea? 10.0
Compare and contrast the merits and demerits of protected and unprotected fats for ruminants? Under which condition protection of fat could be a mandate?
5. NRC or ARC which one is really a noble approach under current 10.0
perspective of Bangladesh? Which feeding system would be most applicable for low productive dairy cows in Bangladesh?

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M S in Animal and Poultry Nutrition

July-December Semester Final Examination 2015

Course title: Nutrition and Reproduction

Course Code: NRP-602

Total marks: 40

Time: 2 hour

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

1. a) Write down the relationship between nutrition and reproduction. Mention the role of fat soluble vitamin in cows fertility. **8**
- b) Write down nutritional requirements of a 180 days pregnant cow having 350 kg liveweight and produces 12 liter milk/daily. **8**
- c) Mention the factors for selecting the feed ingredients for ration formulation of a lactating cow. **4**
2. a) Describe the biological framework those determine the cows' herd fertility. **7**
- b) Write how you will analyze the dairy herd fertility under cooperative dairying conditions of Bangladesh? **8**
- c) What is feeding standard? Describe a feeding standard with its limitation which are use under commercial dairy sector. **5**
3. a) Write how milk compositions determine the milk value? Write in brief the feeding of heifer. **6**
- b) Describe the reproductive pattern of a Black Bengal doe. **4**
- c) Narrate a ration with available feed ingredients for a yearling bull having 350 kg live weight whose dairy live weight gain is 400g/day, this bull is use to serve a cow per week and the ejaculation volume is 12ml/service **10**