



Kafrelsheikh University

Faculty of Veterinary Medicine

Basic Animal Nutrition 1st Semester Exam

January 10, 2016

Time allowed is 2 hours

Full mark is 25 Marks

I. Answer the following questions (10 marks, 2 each)

- 1) Enumerate the essential fatty acids and what are its nutritional functions.
- 2) Diagrammatically illustrate how the NPN is utilized by the rumen micro-organisms and mention the precautions of urea addition to the feed of ruminants.
- 3) What is the meaning of BV of protein and illustrate with equations the difference between the apparent and true BV of protein.
- 4) What are the main nutritional functions of vitamin A may interfere with the performance of vision.
- 5) How the live bodies keep its water balance?

II. Answer with Yes or No (5 marks, 0.5 each)

- () 1- A protein is said to be of good quality if it is just high in digestibility
- () 2- Bound water is non-considerable water supply of water to the body through feeding-stuffs.
- () 3- Products of crude fiber digestion include essential fatty acids, gases and heat.
- () 4- The lower the body water, the higher body fat content.
- () 5- Incidence of milk fever tends to increase as the dietary Ca level increases in the late dry cow ration without anions.
- () 6- Rumen microorganisms have a significant role in lipid metabolism in ruminants
- () 7- Potassium deficiency is usually seen on animals fed high – roughage diets.
- () 8- White muscle disease could be treated by Se supplement.
- () 9- Water – soluble vitamins could be stored in appreciable quantities in body tissue.
- () 10- Thiamin deficiency lead to polyneuritis and / or curled toe paralysis.

III. Answer the following Questions (10 marks)

A. Write short notes on the following (4 marks);

1. Mineral classification (2 marks)
2. Effects of protein, fat, starch and source of NDF on NDF fermentation (2 marks)

B. Mention only (4 mark, 1 each):

1. Sources of pectin
2. Types of organic acids in fresh and ensiled forages
3. Factors decrease zinc availability
4. The nutritional problems associated with phosphorus deficiency

C. Complete the following questions (2 mark, 0.5 each):

1. Deficiency ofcauses sudden death
2. Deficiency ofcauses diarrhea
3. Deficiency ofcauses still birth
4. Deficiency ofcauses calf tetany



Prof. Dr. Sayed M. Hegazi