

**An- Najah National University
Faculty of Agriculture & Vet.Med
Feeds and Feeding Exam 1**

- 1. Choose the best answer: (40 points; Ilo 1-4)**
- 1. The feed nutrients that produce energy are:**
 - a) Vitamins. Minerals. Carbohydrates
 - b) Carbohydrates, proteins, lipids
 - c) Carbohydrates, lipids, vitamins
 - d) All of them.

 - 2. Animals get most of its energy requirements from:**
 - a) Proteins
 - b) Lipids
 - c) Carbohydrates
 - d) Water.

 - 3. One gram of fat gives how many kcal:**
 - a) 4
 - b) 7
 - c) 9
 - d) 38.

 - 4. Fats are not included in animal diet at high level because:**
 - a) It is expensive
 - b) Of oxidation
 - c) Reducing diets appetite
 - d) A+B.

 - 5. The followings are essential amino acids except:**
 - a) Serine
 - b) Lysine
 - c) Methionine
 - d) Threonine

 - 6. Animal proteins are better than plant proteins because:**
 - a) Of more essential amino acids
 - b) Of the balanced amino acids
 - c) Of high biological value
 - d) All of them.

 - 7. Cereals are deficient in:**
 - a) Proline
 - b) Histidine

- c) Arginine
- d) Lysine

8. Animal body contains-----ash:

- a) 10%
- b) 20%
- c) 30%
- d) 5%.

9. The followings are micro minerals excepe:

- a) Iron
- b) Sulfur
- c) Iodine
- d) Zinc.

10. The following are water soluble vitamins except:

- a) Vitamin C
- b) Vitamin B12
- c) Vitamin K
- d) Niacin.

11. The following feeds are roughages except:

- a) Pastures
- b) Silage
- c) Barley grains
- d) Straw.

12. Roughages are characterized by its:

- a) Low digestibility
- b) Low protein content
- c) High fiber
- d) All of them.

13. The followings are concentrated feeds except:

- a) Silage
- b) Wheat grain
- c) Oat grain
- d) Sorghum.

14. The protein supplement is:

- a) Contains more than 18% crude protein
- b) Can be of both plant or animal origin
- c) Can be added to types of diets
- d) All of them.

15. Vitamins are not synthesized in animal body except:

- a) Vitamin A
- b) Vitamin D
- c) Niacin
- d) Vitamin C.

16. Which one is a volatile fatty acid?

- a) Arachidonic acid
- b) Acetone
- c) Acetic acid
- d) Glutamic acid.

17. The enzyme involved in fatty acid metabolism is:

- a) Lipase
- b) Amylase
- c) Hormone sensitive lipase
- d) All of them.

18. Lipids are absorbed in the form of:

- a) Glucose
- b) Fructose
- c) Phospholipids
- d) Chylomicrons.

19. One of the endopetidases enzymes is the:

- a) Trypsin
- b) Pepsin
- c) Lactase
- d) Maltase.

20. The non protein nitrogen sources are:

- a) True proteins
- b) Of low quality protein equivalent
- c) Of high level of protein equivalent
- d) Used in ruminants diets.

2. Why is protein quality is not important in ruminant diets? (4 points; Ilo 3)

3. Name two methods in upgrading animals feeds. (2 points; Ilo 3)

4. Name two processing methods for local roughage and the advantages of each. (4points; Ilo 2,3)