

PNG UNIVERSITY OF TECHNOLOGY
DEPARTMENT OF AGRICULTURE
I SEMESTER 2021
FINAL EXAMINATION. 4TH JUNE 2021
AG 114. ANATOMY AND PHYSIOLOGY OF FARM ANIMALS

Time 3 hours

Max. Marks 100

(NOTE: READ AND FOLLOW INSTRUCTIONS ON THE ANSWER BBOOK)

- I. Name the bones (b1-5) and joints (j 1-5) which are marked on the figure. 1 mark each (10)

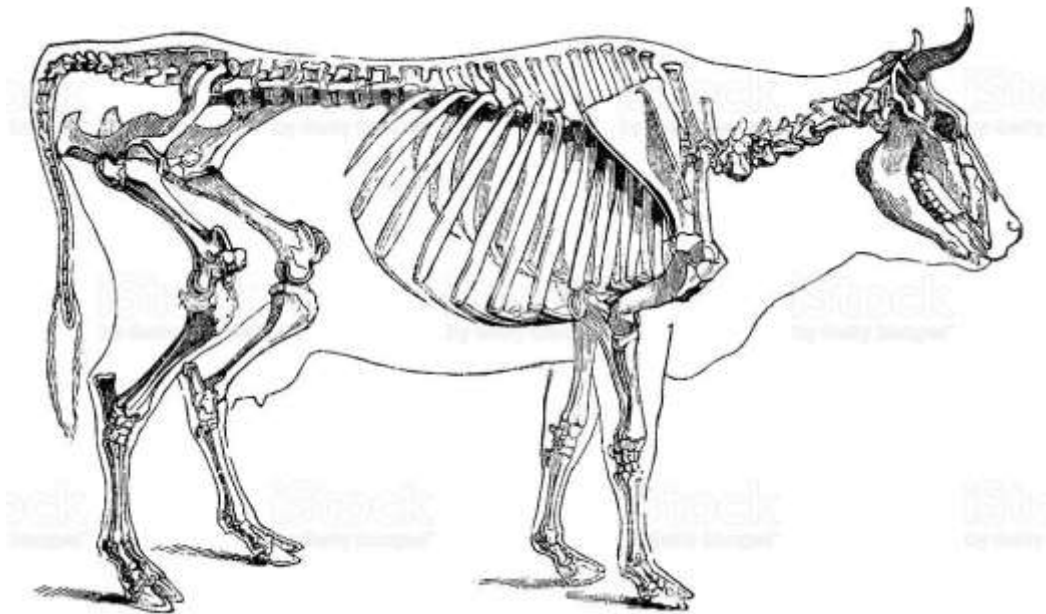


Fig 1. Skeletal system of cattle.

- II. Write the function of the following: 1 mark each (10)
- a. Goblet cells
 - b. Thrombocytes.
 - c. Surfactant.
 - d. Oviduct.
 - e. Insulin.
 - f. Oxytocin
 - g. Hydrochloric acid
 - h. Amylase
 - i. Lymphocyte.
 - j. Hormones
- III. Based on the experiments that you have done, what are the effects of the following : 2 marks each(10)
1. Alloxan.
 2. Insulin.

3. Estrogen.
 4. Amylase.
 5. Bacteria on cellulose
- IV. What do you understand by negative feedback mechanism in endocrine system? Name the hormones secreted by pituitary gland along with their action. 2+3+10 (15)
- V. Define the following terms: 1 mark each (10)
1. Dead space.
 2. Emulsification.
 3. Cellular respiration
 4. Gluconeogenesis.
 5. Partial pressure.
 6. Erythropoiesis.
 7. ADH
 8. Spermatogenesis.
 9. LEYDIG CELLS
 10. Cardiac sphincter.
- VI. What are the differences in the digestive system of pigs and birds. Explain the process of digestion in simple stomached animals. 5+10 (15)
- VII. Define monoestrous and polyestrous animals with examples. Name the different phases of estrous. 2+2+6 (10)
- VIII. Write the answer in one word 2marks each (20)
1. A hormone which is a modified amino acid
 2. Movement of air into lungs from outside.
 3. Hormone which controls the volume of urine
 4. Example of an irregular bone.
 5. Protein digesting enzyme in INTESTINE.
 6. Node responsible for initiation of heart contraction
 7. Name the gland which is both an endocrine and exocrine in nature.
 8. The part of small intestine where absorption takes place.
 9. Skin is an example of which tissue?
 10. Chemical produced from Basophil