

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2019/2020**

**FIRST YEAR FIRST SEMESTEREXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH**

**IPH 2106: COMPARATIVE ANATOMY OF FOOD ANIMALS I**

**DATE: DECEMBER, 2019 TIME: 2 HOURS**

INSTRUCTIONS: ANSWER ALL THE QUESTIONS IN **SECTION A** (COMPULSORY) AND ANY OTHER ONE QUESTION IN **SECTION B**

**SECTION A: 48 MARKS**

1. Differentiate between the following:-

 a. Food and non food animals. (2 marks)

 b. Totipotent cell and pluripotent cell. (2 marks)

 c. Ruminants and non ruminants. (2 marks)

2. Describe analogous structures. (6 marks)

3. Explain the significance of comparative anatomy. (6 marks)

4. State the tissue formed by the following groups of cells:-

 a. Cells that gather information and control body functions. (1 mark)

 b. Cells of reproduction. (1mark)

 c. Cells that store nutrients. (1 mark)

 d. Cells that move body organs and body parts. (1 mark)

 e. Cells that connect body parts. (1 mark)

 f. Cells that cover and line body organs. (1 mark)

5. Explain the gazzetted food animals according to the meat control Act 356. (6 marks)

6. State three signs of generalized disease as seen during postporten examination of a food animals. (6 marks)

7. Describe the significance of embryology. (6 marks)

8. Describe the process of organogenesis. (6 marks)

**SECTION B: 22 MARKS**

9. a. Define histology. (2 marks)

b. Explain the significance of histology. (8 marks)

 c. Explain four functions of epithelial tissues. (12 marks)

10. a. State four objectives of meat inspection. (4 marks)

b. Apart from abnormal discharges or protrusion from body openings, describe five abnormalities inspected during antemortem. (10 marks)

c. State four examples of abnormal discharges or protrusions from body opening. (8 marks)

11. a. Define parturition. (2 marks)

 b. Describe the three stages of parturition. (15 marks)

c. State the average length of gestation in months of the following food animals:- (5 marks)

i. Cattle

 ii. Goats

 iii. Sheep

 iv. Swine

 v. horse