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UNIVERSITY EXAMINATIONS 2023/2024

**FIRST YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN ANIMAL HEALTH AND PRODUCTION**

AAP 3153: HISTOLOGY

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) List the common characteristics of epithelial tissue (7 Marks)
- b) Name the components of tunica mucosa of the gastrointestinal tract (3 Marks)
- c) List the layers of the epidermis of the skin (5 Marks)
- d) State five functions of oligodendrocytes in the nervous tissue (5 Marks)
- e) Name all the important stages that a spermatid must pass through during its metamorphosis into spermatozoa (5 Marks)
- f) Describe the histological features of cardiac muscle (5 Marks)

QUESTION TWO (20 MARKS)

- a) Describe the histological structure and functions of the following cells:
 - i. Neutrophils (5 Marks)
 - ii. Mesenchymal cells (5 Marks)



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

iii. Fibroblasts (5 Marks)

b) Describe the microscopic structure of continuous capillaries (5 Marks)

QUESTION THREE (20 MARKS)

a) The primary reproductive organs of a mammal are gonads. Describe the main histological features of the:

- i. Ovary (5 Marks)
- ii. Epididymis (5 Marks)

b) Discuss in detail the microscopic structure of the following:

- i. Transitional epithelium (5 Marks)
- ii. The trachea (5 Marks)

QUESTION FOUR (20 MARKS)

a) With the aid of a well labeled diagram, describe the histology of a classical lobe of a porcine liver (10 Marks)

b) Discuss the histological features of following:

- i. Proximal convoluted tubule (5 Marks)
- ii. Endocardium (5 Marks)

