



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya

Tel: +254(0) 799 529 958, +254(0) 799 529 959, + 254 (0) 712 524 293,

Website: info@must.ac.ke Email: info@must.ac.ke

University Examinations 2024/2025

FIRST YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN ANIMAL HEALTH AND PRODUCTION

AAP 2102: EMBRYOLOGY AND HISTOLOGY

DATE: JANUARY 2025

TIME: 1½ HOURS

INSTRUCTIONS:

*Answer question **ONE** and any other **TWO** questions*

QUESTION ONE (30 MARKS)

- a) Define the following terms as used in Embryology (5 Marks)
 - i. Embryology
 - ii. Spermiogenesis
 - iii. Organogenesis
 - iv. Histogenesis
 - v. Teratology
- b) Name the three germ layers and the structures that arise from each layer (6 Marks)
- c) Describe how entry of multiple sperms into the egg is prevented. (5 Marks)
- d) Outline various causes of embryonic malformations. (5 Marks)
- e) Describe the importance of staining in histology and list some types of stains used. (5 marks)
- f) Describe the steps involved for implantation to occur. (4 Marks)

QUESTION TWO (15 MARKS)

- a) Describe neurulation (5 Marks)
- b) Discuss oogenesis (10 Marks)

QUESTION THREE (15 MARKS)

- a) Discuss five types of epithelial tissues highlighting their microscopic appearance and location (10 Marks)
- b) Describe the formation of stomach in dogs (5 Marks)

QUESTION FOUR (15 MARKS)

- a) Describe formation of the cardiovascular system. (7 Marks)
- b) Describe the formation of endochondral bone (8 Marks)