Summer Examinations 2015

ANW304115N

Module Title: Animal Reproductive Science
Level: Six
Time Allowed: Two hours

Instructions to students:

- Enter your student number not your name on all answer books.
- You can achieve 120 marks in total.
- Ensure you answer all parts of all questions.
- Ensure your student number is displayed on each answer booklet.
- Begin each question on a separate page and label each page clearly with the number of the question you are answering.
- Neither books nor notes may be taken into the examination.
- This is an unseen paper.
- The exam is worth 50% of the mark for ANW3041.

No. of Pages 2
No. of Questions 3
Question 1

a. Describe the main stages of embryonic development in **domestic mammals**. You should include a description of the placentation in **two named species**, and a description of how an estimation of foetal age is determined.

   (15 marks)

b. Identify and explain how **one of each** of the following factors affects embryo development in domestic mammals:

   - genetic factors
   - environmental factors
   - maternal husbandry factors

   (10 marks)

**Total:** 25 marks

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Question 2

a. Describe the stages of parturition, and identify a variety of causes of dystocia in a sheep. You should include estimates of timings for each stage of parturition, and describe the presentation of different causes of dystocia.

   (20 marks)

b. Evaluate the critical events and management processes involved in rearing a dairy calf to weaning.

   (25 marks)

**Total:** 45 marks

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Question 3

Describe how you would approach the investigation of infertility (reduced number of offspring reared to weaning) in **one named species**. You must consider infectious and non-infectious causes and management factors of both the mother and neonate, throughout all stages of the reproductive cycle.

(50 marks)

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End of Paper