



Uva Wellassa University of Sri Lanka
Faculty of Animal Science & Export Agriculture



Animal Science Degree Programme
Year II Semester II
End Semester Examination – August/September 2014

**ANS 232-2 Reproduction and Lactation in Farm Animals - Repeat
Essay (Section II)**

Instructions:

Answer all questions in Section II in booklets provided.

No. of questions : Two (02)

No. of pages : One (01)

Time : One hour (01 hr)

Total marks allocated : 60%

1.
 - I. The Kundasale, Central Artificial Insemination Centre is producing cattle deep frozen semen which packed in ministraws. At the time of packing each ministraw is packed with 30 million motile sperms.
 - a) Calculate the number of deep frozen semen doses that can be produced from one milliliter of fresh bull semen sample with 600000 million/mL sperm concentration and with 80% sperm motility. (10 marks)
 - b) If the volume of ejaculate from the above bull is 4 mL, calculate the number of deep frozen semen doses that can be produced from this bull at a single ejaculate. (05 marks)
 - c) If the volume of each ministraw is 0.25 mL, calculate the volume of diluent needed to dilute the 4 mL semen sample. (10 marks)
 - II. Briefly discuss the factors that should be considered during semen evaluation. (25 marks)
2. Write short notes on followings.
 - I. Spermiogenesis (15 marks)
 - II. Lactogenesis (15 marks)
 - III. Reproductive behaviors and changes in cows during oestrus (20 marks)

[End of Section II]