



**2<sup>ND</sup> SEM. 2004/2005**

**PAGE 1 OF 2**

## **UNIVERSITY OF SWAZILAND**

### **SUPPLEMENTARY EXAMINATION**

**PROGRAMME:        DIPLOMA IN AGRICULTURE  
                          DIPLOMA IN AGRICULTURE EDUCATION  
                          YEAR III**

**COURSE CODE:        APH 303**

**TITLE OF PAPER:        SMALL RUMINANT PRODUCTION**

**TIME ALLOWED:        TWO (2) HOURS**

**INSTRUCTIONS:        ANSWER ANY 4 QUESTIONS.**

**DO NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY  
THE CHIEF INVIGILATOR.**

**QUESTION 1**

Discuss the factors that affect age at which puberty is attained in small ruminants.

**(25 marks)**

**QUESTION 2**

a). Define reproductive rate in small ruminants.

**(2 Marks)**

b). Discuss the factors that affect reproductive rate.

**(15 Marks)**

c). What is estrus synchronization? Explain two methods you would use to synchronize a flock of ewes.

**(8 Marks)**

**QUESTION 3**

Discuss the reproductive disorders likely to be found in rams and explain how they would affect their breeding ability.

**(25 marks)**

**QUESTION 4**

What are the factors that limit the productivity of small ruminants in Swaziland?

Discuss possible solutions to these limiting factors.

**(25 marks)**

**QUESTION 5**

a). What are the main causes of kid mortality in a flock of goats? Discuss the measures you may take to reduce kid mortality.

**(20 marks)**

b). List the measures of reproductive performance in small ruminants.

**(5 Marks)**