



**2<sup>nd</sup> SEM. 2011/2012**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

**PROGRAMME: BSC. ANIMAL SCIENCE YEAR 4**

**COURSE CODE: AS 405 /APH 406**

**TITLE OF PAPER: GOAT AND SHEEP PRODUCTION**

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

**INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR.**

**Question 1**

In order to alleviate poverty in Swaziland, one of the strategies World vision is doing is to engage the rural communities in goat and sheep production. Discuss why World Vision advocates for goat and sheep production rather than cattle production in these communities in order to alleviate poverty.

**(25 marks)**

**Question 2**

Before the tupping season, a goat farmer has to make sure he selects the best bucks to put with the does for breeding. A goat farmer approaches you to assist him select the best bucks to use this coming breeding season. Discuss how you will carry out this.

**(25 marks)**

**Question 3**

The Ministry of Agriculture has just found a market for finished lamb in the Middle East around Ramadan for the Moslem communities. Ramadan is around February.

- a) Draw a breeding calendar for the farmers who would like to aim for this market, indicating when they should condition score, flush and mate the animals. When should the lambing should take place? **(8 marks)**
- b) In order for the lambs to finish at the same time, discuss the techniques that the farmers could employ to have their ewes coming on heat at the same time and thus lambing at the same time. **(17 marks)**

**Question 4**

- a) List the different traits that are used as bases for selection in small ruminants. **(13 marks)**
- b) Using diagrams as illustrations, describe the five different types of crossing. **(12 marks)**

**Question 5**

Goats and sheep have a photoperiod anoestrus period and this is pronounced in the temperate regions. Discuss the factors which affect the length of the breeding season in sheep and goats.

**(25 marks)**