



UNIVERSITY OF SWAZILAND
2nd SEM. 2016/2017
FINAL EXAMINATION PAPER

PROGRAMME: B.Sc. AGRICULTURAL EDUCATION YEAR 4
B.Sc. ANIMAL SCIENCE YEAR 4
B.Sc. AGRICULTURAL & BIOSYSTEMS ENGINEERING
YEAR 4

COURSE CODE: AS 401

TITLE OF PAPER: APICULTURE

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**

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QUESTION 1

- (a) List and describe three activities carried out by bees inside the hive.
- (b) Discuss the three castes found in a bee colony.

(15 Marks)
(10 Marks)

QUESTION 2

Fully discuss bee glands and the role they play in colony cohesion.

(25 Marks)

QUESTION 3

Discuss the winter and spring management of bees.

(25 Marks)

QUESTION 4

- a) Compare and contrast between supersedure and swarming.
- b) Discuss how you can catch, transport and hive a swarm.

(10 Marks)
(15 Marks)

QUESTION 5

Describe the life cycles of the causative organisms of American and European Foul Brood diseases, their development within the honey bee larvae, and how they are diagnosed and treated.

(25 Marks)