THE NATIONAL UNIVERSITY OF LESOTHO FACULTY OF AGRICULTURE

DEPARTMENT OF ANIMAL SCIENCE

SECOND SEMESTER EXAMINATION 2022/2023 SESSION

BSc. AGRICULTURE (ANIMAL SCIENCE)

ANS4508: APICULTURE

JUNE 2023 MARKS: 100 TIME: 3 HOURS

INSTRUCTION: Answer All Questions

Ouestion 1

- a) Give three roles of honey bees in agriculture and explain them clearly (12)
- b) How can you easily differentiate a queen from other members of the colony? (5)

Ouestion 2

Outline the importance of pheromones in honey bee communication (8)

Question 3

List the characteristics of buckfast bees (10)

Question 4

Describe clearly how the product royal jelly is produced and its importance (7)

Ouestion 5

Narrate the effects of weather on pollination (8)

Question 6

Explain in detail what a beekeeper can do to encourage bees to occupy a new hive (8)

Question 7

Tabulate how to prevent swarming in honey bees (8)

Question 8

Give details on how to prepare parent in a colony when producing new nucleus by splitting colony (8)

Question 9

Explain the extraction of honey without use of an extractor (10)

Question 10

- a) Describe American foulbrood disease and give its symptoms (12)
- b) Indicate whether these statements are True or False:
 - Deformed wings on adult bees is caused by presence of virroa mites and wax moths (1)
 - Younger larvae are not susceptible to AFB disease (1)
 - Dead brood is often scattered among healthy brood in Sac brood disease (1)
 - Thymol based fumigants and apiguard are effective against wax moths (1)