

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DIPLOMA IN ANIMAL HEALTH

ANSC 0268: APICULTURE AND AQUACULTURE

STREAMS: DIP. ANHE Y3S2

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 11/12/2019

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- **This examination has two sections i.e., A and B**
- **Attempt ALL questions in section A and any TWO questions in section B**

SECTION A: ATTEMPT ALL QUESTIONS (30 MARKS)

1. Describe three types of hives. (6 marks)
2. Describe the following relation to bees
 - (a) Brood
 - (b) Worker
 - (c) Royal jelly
 - (d) Swarming
 - (e) Propolis
3. Describe any four (4) sources of water for aquaculture. (10 marks)
4. Discuss three (3) factors to consider when siting an aquaculture facility. (6 marks)

SECTION B: ATTEMPT ANY TWO QUESTIONS (40 MARKS)

5. Bees farming is an old practice among many communities in Kenya.
 - (a) Fill in the gaps in relation to the African killer bee
 - (i) Family

- (ii) Genus
 - (iii) Species
 - (iv) Sub-species (4 marks)
- (b) Discuss the value of bee farming to agriculture and the environment. (6 marks)
- (c) Discuss the anatomy of the head of a bee. (10 marks)
6. Bee colonies are very well-organized.
- (a) Discuss the cast system of the colony. (6 marks)
 - (b) Describe four (4) hives products. (4 marks)
 - (c) Describe the hot-bath method of extracting honey. (5 marks)
 - (d) State the steps followed when harvesting honey. (5 marks)
7. Aquaculture is rapidly becoming popular in non-traditional areas in Kenya
- (a) Describe five (5) benefits accrued from aquaculture. (5 marks)
 - (b) Distinguish between the following aquaculture systems
 - (i) Ponds
 - (ii) Race-ways
 - (iii) Cage and pen systems (9 marks)
 - (c) Discuss three water qualities to consider when practicing aquaculture. (6 marks)
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