



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2023/2024 ACADEMIC YEAR

SECOND-YEAR SECOND SEMESTER

SCHOOL OF NATURAL RESOURCES,

ENVIRONMENTAL STUDIES & AGRICULTURE

**BACHELOR OF SCIENCE IN ANIMAL HEALTH AND
PRODUCTION**

COURSE CODE: AHP 2205-1

COURSE TITLE: APICULTURE

DATE: 22/4/2024

TIME: 1430-1700HRS

INSTRUCTION

Answer all questions

- 1 a) State the importance of bee keeping in Kenya (10 Marks)
 b) Describe the races of bees in Kenya (6 Marks)
 c) Outline two functions of each member of a bee colony caste (4 Marks)
- 2 a) State the functions of pheromones secreted by the mandibular glands of the queen bee (4 Marks)
 b) Discuss the steps taken when harvesting honey from the Kenya Top Bar Hive (10 Marks)
 c) State and explain factors to consider when conducting quality control to determine honey quality (6 Marks)
- 3 a) State two (2) uses of the following bee products (6 Marks)
 i) Honey
 ii) Bee wax
 iii) Propolis
 b) Discuss reasons for replacing a queen with a new one in a bee colony (4 Marks)
 c) Discuss and explain reasons for the following bee behaviour (10 Marks)
 i) Absconding
 ii) Scouting
 iii) Swarming
 iv) Communication
 v) Migration
- 4 a) State three bee pests that attack and destroy hives (3 Marks)
 b) Discuss factors to consider when siting an apiary (7 Marks)
 c) Discuss the merits and demerits of Kenya top bar hive (KTBH) as a modern hive (10 Marks)
- 5 a) State the importance of regular hive inspection and factors to consider when carrying out hive inspection (6 Marks)
 b) Describe two honey processing methods (4 Marks)
 c) Discuss five diseases that affect honey bees (10 Marks)
- 6 a) Discuss good seasonal management done in the following three phases of the colony cycle (12 Marks)
 i) Build- up period
 ii) Honey flow period
 iii) Dearth period
 b) Discuss honey grading in Kenya (4 Marks)
 c) Discuss elements of honey standards (4 Marks)

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