JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EXTENSION EDUCATION AND SEOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN ANIMAL SCIENCE

2022/2023 ACADEMIC YEAR

REGULAR

COURSE CODE: AAB1208

COURSE TITLE: PASTURES AND FODDER PRODUCTION

EXAM VENUE: **STREAM: (BSc Agric Extension and Education)**
                                                                    (BSc Animal Science)
DATE: **EXAM SESSION:**

TIME:

Instructions
1. **Answer ALL questions in Section A (compulsory) and ANY TWO questions in Section B**
2. **Candidates are advised not to write on the question paper**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A [30 MARKS]

Answer ALL questions in this section

1. Explain the following terms:
   a) Forage crop   (1 mark)
   b) Browse   (1 mark)
   c) Legume   (1 mark)
2. Outline the animal-oriented objectives of pasture management.   (6 marks)
3. Give three steps of forage establishment.   (3 marks)
4. Mention any three reasons for seed bed preparation.   (3 marks)
5. Narrate three methods of sowing.   (3 marks)
6. Explain relationship between *Rhizobium* bacteria and root nodules of legumes.   (3 marks)
7. Distinguish between deferred grazing system and zero-grazing system.   (3 marks)
8. Briefly describe three grass types found in the narrow coastal belt.   (6 marks)

SECTION B [40 MARKS]

Answer ANY TWO questions from this section

9. Evaluate the factors to consider in selection of pasture species for planting.   (20 marks)
10. Explore some economic benefits of Agroforestry.   .   (20 marks)
11. Describe grassland classification based on life forms and water requirements.   (20 marks)
12. Alley cropping is an agroforestry system where arable (food) crops are grown between rows of planted shrubs and trees, preferably leguminous species. Examine the management cycle and the benefits of this system.   (20 marks)