



UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN HORTICULTURE

ACH 407: TURFGRASS MANAGEMENT

DATE: APRIL 4, 2017

TIME: 8:30-10:30AM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

QUESTION ONE:

- a) Distinguish between C₄ grasses and C₃ grasses (4 Marks)
- b) State the roles that turfgrasses play in a designed landscape. (4 Marks)
- c) Briefly describe any two vegetative parts used for identification in turfgrasses. (4 Marks)
- d) Describe two ways in which turfgrasses spread (4 Marks)
- e) Briefly explain the factors that influence tillering in turfgrasses. (5 Marks)
- f) Briefly discuss the following giving relevant examples,
 - i. Why turfgrass can withstand constant defoliation/ mowing (2 Marks)
 - ii. Why turfgrass inflorescence is not entirely depended for identification (2 Marks)
- g) Outline the problems that face the turfgrass industry in Kenya. (5 Marks)

QUESTION TWO:

- a) Discuss the methods used to enhance aeration in a compacted turf. (10 Marks)
- b) Define the term thatch as used in turfgrass management and list three problems associated with thatch. (10 Marks)

QUESTION THREE

University of Embu intends to rehabilitate the soccer field pitch. Discuss the factors that should be considered in selecting the type of turf to install. (20 Marks)

QUESTION FOUR

- a) Discuss the three main sub-families used as turfgrasses, explaining their characteristics and ecological adaptation. (12 Marks)
- b) Nitrogen supply can be interrelated to the height of turfgrass cut. Discuss the relationship between Nitrogen supply and the shoot/root ratio in turfgrasses. (8 Marks)

QUESTION FIVE

A client intends to buy mowing equipment for golf course use. Guide him on the differences between a reel mower and rotary mower as equipment used in turfgrass management. (20 Marks)

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