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**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

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

**2016/2017 ACADEMIC YEAR**

**REGULAR**

**COURSE CODE: AHT 3426:**

**COURSE TITLE: TURF AND GROUND COVER MANAGEMENT.**

**EXAM VENUE: STREAM: BSc. (Horticulture)**

**DATE: EXAM SESSION:**

**TIME: 2 HOURS**

**Instructions:**

1. **Answer ALL questions in section A and ANY other 2 Questions in section B.**
2. **Candidates are advised not to write on 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 from this Section.**

1. Suggest the following:
	1. five lawn problems which result from poor turf management decisions. (3 Marks)
	2. Five symptoms of overwatering turf. (3 Marks)
	3. Three symptoms of waterdefieciency in turf (3 Marks)
2. Outline the following:
	1. Three benefits of core cultivation in turf establishment (3 Marks)
	2. Three considerations when choosing turf to plant. (3 Marks)
	3. Three reasons why it is advisable to leave grass clippings on the lawn. (3 Marks)
3. List Three symptoms of iron deficiency in turf. (3 Marks)
	1. State the1/3 rule in mowing. (1 Mark)
	2. Suggest two reasons for following the 1/3rd rule when mowing. (2 Marks)
4. Explain the following:
	1. Two practices which can be engaged in so as to maximize carbon intake benefits of lawns and other turfgrass areas. (2 Marks)
	2. 2 R’s of Fertilizer BMPs (best management practices). (3 Marks)
	3. Three specialized tools needed for artificial turf maintenance:

 (2 Marks)

**SECTION B.**

**ANSWER ANY TWO QUESTIONS FROM THIS SECTION**

1. For centuries, humans have used turfgrasses to enhance their environment and quality of life. Discuss the three main benefits of turf grasses. (20 Marks)
2. The Fourth Year Horticulture Class of 2016 has been requested to make a presentation on the financial costs of natural turf. Outline what your presentation will entail. (20 Marks)
3. “The quality of any turf area is determined by theability of the grass to serve its intended purpose. Discuss. (20 Marks)
4. Briefly discuss the following Environmental conditions which enhance growth ofnatural turf
	1. Soil environment. (6 Marks)
	2. Water and irrigation. (8 Marks)
	3. Shade. (6 Marks)