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**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

**YEAR IV EXAMINATION FOR THE DEGREE OF BACHELOR OF SCINECE IN HORTICULTURE**

**AHS 2409: LANDSCAPE DESIGN AND MANAGEMENT**

**DATE: AUGUST 2015 TIME: 2 HOURS**

**INSTRUCTION: ANSWER ALL QUESTIONS (70 MARKS)**

**QUESTION ONE**

1. Landscape design is a problem solving activity. Discuss this statement. [10 marks]
2. Differentiate formal from informal/natural garden styles. [5 marks]

**QUESTION TWO**

The harmonious combination of various parts to create a feeling of oneness results to unity in landscape design process. Discuss how this can be achieved through the application of landscape design principles. [10 marks]

**QUESTION THREE**

Your client Mr. Joel has two pieces of land (X and Y) each measuring 50 acres. As a landscape designer you have been contracted by MR. Joel to advice him on which portion of land to develop for use for recreational purposes. From the site analysis, you have found that Land X has a steep slope of 25% while land Y has a gradual scope which is nearly flat but with a drainage challenge. Assuming that after the site analysis you have recommended Land parcel X for the said landscape use activity. Use the provided information to answer the following questions:

1. Using contour lines, illustrate how the two pieces of land would be represented on a topographical map to potray the slope difference. [2 marks]
2. What kind of landscape construction operation would you recommend to your client to perform first on his site considering its characteristics given above and why is this operation important? [3 marks]
3. Using a well labelled diagram, show a cross-sectional view of land X after the proposed operation [2 marks]
4. Given that the horizontal distance of land X which is 50m is perpendicular to its vertical distance, what would be its vertical distance? [1 mark]
5. What factors would you consider before advising your client on the correct surfacing materials? [2 marks]

**QUESTION FOUR**

1. Explain THREE ways of installing turf grasses [6 marks]
2. Differentiate between the following processes as carried out in turf grass maintenance;
3. Aerating the lawn [2 marks]
4. Patching up of lawns [2 marks]
5. Describe the process of installing containerized plants. [5 marks]

**QUESTION FIVE**

1. Discuss the maintenance practices for the following landscape plants:
2. Trees and shrubs [5 marks]
3. Flower plantings [5 marks]
4. Differentiate topiary pruning from bonsai development as applied in landscape plants. [5 marks]
5. What are the design considerations when designing roof plantings? [5 marks]