

**W1-2-60-1-6**

JOMO KENYATTA UNIVERSITY

OF

AGRICULTURE AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS 2021/2022**

YEAR 3 SEMESTER 2 EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL HORTICULTURE AND LANDSCAPE TECHNOLOGY

**AHL 2304: ARBORICULTURE**

**DATE: DECEMBER 2021 TIME: 2 HOURS**

**INSTRUCTIONS: Answer Question One and Any Other TWO Questions**

**QUESTION ONE (30 MARKS)**

1. Arboriculture plays a big role in improving urban environment. Discuss **(8 marks)**
2. Briefly explain the main goals of Arboriculture under urban context **(3 marks)**
3. With illustration, describe the role of xylem in the response to damages/injuries in trees

**(8 marks)**

1. Trees with codominant stems vary in structural weakness. Explain **(8 marks)**
2. Describe how you can protect tree root from damaging hard structures like pavement

**(3 marks)**

**QUESTION TWO (20 MARKS)**

1. Giving relevant plant examples, explain how to select tree for;
2. Streets **(3 marks)**
3. Botanical gardens **(3 marks**)
4. Screens **(3 marks)**
5. Explain ‘above ground’ site attributes to consider when selecting tree species for your landscaping job **(8 marks)**
6. Describe how vines maintain upright growth  **(3 marks)**

**QUESTION THREE (20 MARKS)**

A client asked you to plant and maintain his commercial landscape;

1. Detail established and maintenance of the following landscape feature
2. Espalier **(3.5 marks)**
3. Arbor **(3 marks)**
4. Topiary **(3.5 marks)**
5. Illustrate how you would improve plant survival in areas with poor drainage **(4 marks)**
6. Explain the types of tree branch pruning cuts you would be carrying out **(6 marks)**

**QUESTION FOUR (20 MARKS)**

You established your plants nursery in a competitive location in Nairobi County;

1. How and why will you carry out structural pruning for your tree seedlings **(10 marks)**
2. Explain to your clients how to select good quality planting materials **(10 marks)**