



# **MACHAKOS UNIVERSITY**

**University Examinations for 2020/2021 Academic Year**

**SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT**

**DEPARTMENT OF ENVIRONMENTAL SCIENCES**

**THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR**

**BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)**

**ERC 309: URBAN FORESTRY**

**DATE: 26/3/2021**

**TIME: 2.00-4.00 PM**

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## **INSTRUCTIONS;**

**Answer question ONE and any other TWO questions**

### **QUESTION ONE (30 MARKS)**

- a) Discuss the importance of carrying out an inventory of urban forests (5 marks)
- b) Briefly explain the role of urban forestry in urban heat island amelioration (5 marks)
- c) Discuss the environment of urban forest in terms of space and soils (5 marks)
- d) Outline the historical development of urban forestry (5 marks)
- e) Explain the impacts of increased urbanization on urban forest establishment (10 marks)

### **QUESTION TWO (20 MARKS)**

Discuss the necessity for tree growth enhancement in urban areas

### **QUESTION THREE (20 MARKS)**

Discuss challenges of urban forests management and suggest appropriate interventions

### **QUESTION FOUR (20 MARKS)**

Discuss the relevant urban tree ordinances and their significance in urban forest management

### **QUESTION FIVE (20 MARKS)**

Give a detailed account of the environmental benefits and costs associated with establishing an urban forest