



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

SECOND SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE IN
ENVIRONMENTAL RESOURCE CONSERVATION

ERC 309: URBAN FORESTRY

DATE: 30/11/2016

TIME: 8.30-10.30 AM

INSTRUCTIONS:

Answer Question One and Any Other Two Questions

QUESTION ONE

- a) Explain the following terms
- i) Urban forestry (2 marks)
 - ii) Silviculture (2 marks)
 - iii) Open-Space (2 marks)
 - iv) Green space (2 marks)
 - v). Urban sociology (2 marks)
- b) Explain **five** principles essential in planning and designing of urban forests. (10 marks)
- c) Explain **five** benefits of urban forestry in Kenya. (10 marks)

QUESTION TWO

- a) Explain **five** basic growth requirements of tree species in urban forestry. (10 marks)

- b) Discuss five major challenges faced in the establishment of urban forests and indicate possible solutions for each of them. (10 marks)

QUESTION THREE

- a) Explain ten elements of a successful urban forestry program. (10 marks)
- b) Discuss five factors that should be considered in selection of tree species for urban forestry. (10 marks)

QUESTION FOUR

- a) Discuss five propagation techniques for ornamental perennial trees in urban areas. (10 marks)
- b) Describe how you would develop a good management plan for an urban forestry setting (10 marks)

QUESTION FIVE

- a) Discuss the process and the content in preparing a local physical development plan. (10 marks)
- b) Discuss the powers bestowed to county governments under the physical planning act in relation devolved functions of forestry extension. (10 marks)