

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

**FACULTY OF APPLIED SCIENCES
DEPARTMENT OF FOREST RESOURCES AND WILDLIFE MANAGEMENT
BACHELOR OF SCIENCE HONOURS DEGREE
MAIN EXAMINATION**

SILVICULTURE: EFW 4108

January 2013

Time Allowed: 3 Hours

Total Marks: 100

INSTRUCTIONS TO CANDIDATES:

Answer **QUESTION ONE** and any **THREE** others. Each question carries **25 marks**.

1. Give a detailed outline of economic, biological and social factors in commercial timber plantations.
2. Discuss the importance of introducing plantation forestry in Zimbabwe.
3. Discuss the feasibility of natural regeneration in a production plantation.
4. (a) Clearly explain the following methods used in thinning:
 - (i) systematic thinning [5 marks]
 - (ii) selective thinning [5 marks]

(b) Outline the mensurational effects of thinning [15 marks]
5. Describe the silvicultural systems that result in even aged forests.
6. (a) Describe **three** factors that influence the selection of a site preparation method. [10 marks]
(b) Explain in detail the techniques that are used for site preparation. [15 marks]

***** END OF PAPER *****

