

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

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

ENTOMOLOGY FOR FOREST AND WILDLIFE: EFW 4208

May 2013

Time Allowed: 3 Hours

Total Marks: 100

INSTRUCTIONS TO CANDIDATES:

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

1. Describe the integrated pest management procedure for a long lasting solution to insect pest outbreaks in combined tree plantation.
2. With **NAMED** examples of insect pests, discuss the nature and effect of insect damage to different parts of a tree.
3. With named examples of insect species, describe the ecosystem services provided by insects.
4. Explain how sound knowledge on the ecology, biology and behaviour of tsetse flies has been applied in their control in Africa.
5. (a) Describe the life cycle of the brown wattle mirid, (*Lygidolon laevigatum*) on the black wattle (*Acacia mearnsii*). **[12 marks]**

(b) Describe the nature and effects of damage of this pest and suggest methods of its control and monitoring. **[13 marks]**
6. Produce a tick management strategy in a mixed livestock and wildlife production system.

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

