

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN WILDLIFE MANAGEMENT**

**WIEM 241: PLANT ECOLOGY**

**STREAMS: WIEM Y2S2**

**TIME: 2 HOURS**

**DAY/DATE: WEDNESDAY 18/04/2018**

**8.30 A.M. – 10.30 A.M.**

**INSTRUCTIONS:**

- Answer ALL questions in Section A and any TWO questions in Section B.
- Do not write anything on the question paper.

**SECTION A (30 MARKS)**

1. Explain the following
  - (a) Ecology (1 mark)
  - (b) Community (1 mark)
  - (c) Key stone species (1 mark)
  - (d) Ecosystem (1 mark)
  - (e) Phenology (1 mark)
  - (f) Net primary productivity (1 mark)
2. Giving examples differentiate between abiotic and biotic components of a grassland ecosystem. (6 marks)
3. Briefly discuss three environmental factors that influence plant growth. (6 marks)
4. With respect to survival fitness briefly discuss the advantages and disadvantages of annual plants. (6 marks)
5.
  - (a) Explain the concept 'Plant Life History' (1 mark)
  - (b) Briefly discuss the key factors that influence plant productivity. (5 marks)

**SECTION B (40 MARKS)**

6. Discuss the key factors that influence species composition distribution and abundance in an area. (20 marks)
  7. Discuss the roles of fire in a plant community. (10 marks)
  8. Discuss how human influence affect growth and productivity of plants. (20 marks)
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