

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

WIEM 424 : ADVANCED ECOLOGY

STREAMS: WIEM Y4 S2

TIME: 2 HOURS

DAY/DATE: THURSDAY 9/04/2020

2.30 P.M - 4.30 P.M.

INSTRUCTIONS

Answer questions in Section **A** and any **Two** questions in section **B**.
Do not write anything on the question paper

SECTION A 30 MARKS

Q.1. Write short notes on the following terms as used in ecology.

(a) Community [2 Marks]

(b) Tolerance limits [2 Marks]

(c) Biomagnifications [2 Marks]

Q.2. Explain using a simple diagram, why the linear model of ecosystem is not completely descriptive of ecosystem structure. [6 Marks]

Q.3. Explain the term ' interspecific competitions' as used in ecology. [4 Marks]

Q.4. Explain the stages of ecological succession in an ecosystem following a catastrophic Disturbance by a tsunami. [6 Marks]

Q.5. Discuss how dispersal mechanisms result in species distribution. [6 Marks]

Q.6. Explain various factors that determine species richness. [4 Marks]

SECTION B. 40 MARKS

Q.7. (a) Discuss the species diversity and abundance as dictated by competition in dry lands. [10 Marks]

Q.8. (b) Discuss various ecological principles and concepts used in conservation and management. [20 Marks]

Q.9. (a) Discuss the application of remote sensing technology in phenology. [10 Marks]

(b) Explain species abundance in relation to environmental gradients. [10 Marks]

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