

GRP 17

EGERTON UNIVERSITY

ZOOL 210: ECOLOGY CAT 1 2025

INSTRUCTION: ANSWER ALL QUESTIONS IN THE ANSWER SHEET PROVIDED

1. Explain Liebig's Law of the Minimum and give two ecological examples that illustrate this principle. (5 mks)
2. Describe ways through which terrestrial organisms overcome water stress. (6 mks)
3. Why are most natural food chains short (3–5 trophic levels)? Use Lindeman's law to support your explanation. (4 mks)
4. Explain why;
 - a. Desert rodents produce concentrated urine, while freshwater fish excrete ammonia. (4 mks)
 - b. Tropical rainforests have higher NPP than deserts using stomatal physiology (4 mks)
5. Define trophic efficiency and explain three factors that influence it. (7 mks)