

6RP 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)**