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

WIEM 423: ENVIRONMENTAL PHYSIOLOGY

STREAMS: BSc. WIEM (Y4S2)

TIME: 2 HOURS

DAY/DATE: TUESDAY 09/04/2024

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS

- **Answer all questions in section A and any two in section B**
- **Do not write on the question paper**

SECTION A: (30 marks)

1. Briefly explain the direct effects of chemical contaminants on the behaviour and ecology of wildlife. (6 marks)
2. Animals respond to environmental change in various ways depending on the species. Briefly elaborate this statement. (6 marks)
3. Highlight two ways through which altered behaviour can affect species interaction. (4 marks)
4. Briefly describe the use of various wildlife species as bioindicators. (6 marks)
5. Explain four environmental factors that affect thermal regulation in animals. (4 marks)
6. Briefly describe the animal response strategies to heat stress in an ecosystem. (4 marks)

SECTION B: (20 marks)

7. Discuss the relevance of environmental physiology in management of wildlife in protected areas. (20 marks)

8. Discuss the contribution of physiological and morphological adaptations to the spatial distribution of wildlife in savanna ecosystems. (20 marks)

 9. In reference to behavioural responses to evolutionary processes discuss the following
 - a) Hybridization (10 marks)
 - b) Speciation (10 marks)
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