

FACULTY OF SCIENCE

DEPARTMENT OF ZOOLOGY

MODULE ZOO0047

CAMPUS APK

EXAM NOVEMBER 2015

DATE: 20 NOVEMBER 2015

ASSESSOR(S)

EXTERNAL MODERATOR

DURATION 2 HOURS

SESSION 08:30 PROF J JANSE VAN VUREN PROF P KING MARKS 80

NUMBER OF PAGES: 2 PAGES

INSTRUCTIONS: Answer all the questions.

QUESTION 1

Discuss the ionic and osmotic regulation as well as water balance by animals on shores and in estuaries with the emphasis on dealing with the external variation.

QUESTION 2

In freshwater habitats there are key problems that lead to a change in reproductive strategies. Identify and describe three conditions or changes that become problems to the reproductive cycle. Explain the different strategies organisms use to deal with changing conditions.

QUESTION 3

Desserts are very hot and dry habitats. Identify and discuss the strategies followed by small ectotherm evaders and large endotherm evaporators to control body temperature under these extreme conditions.

QUESTION 4

A number of sensory problems are experienced by organisms living in the deeper waters of the sea. Discuss physiological adaptations in these habitats.

QUESTION 5

Explain the importance of microphagous and planktonic feeding systems in most freshwater environments.

TOTAL 80

(20)

(15)

(25)

(10)

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