

TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR THE DIPLOMA IN ENVIRONMENTAL SCIENCE.

DES 16S /YEAR1/ SEMESTER1

AES 2102: SURVEY OF PLANT & ANIMAL KINGDOM

INSTRUCTIONS TO CANDIDATES

Answer questions ONE (COMPULSORY) and any other TWO questions.

QUESTION 1 (COMPULSORY)

- a) Define the following terminologies (5mks)
 - i. Systematics
 - ii. Invertebrates
 - iii. Acoelomates
 - iv. Coelomates
 - v. Chordates
- b) State the order of classification of animal kingdom (hierarchy) starting from the most general to the more specific (5mks)
- c) What is the difference between **open and closed circulatory system** as used in animal classification? (2mks)
- d) Distinguish between poikilothermous and homoithermous organisms (2mks)
- e) List the characteristic features class Mammalia (2mks)
- f) Distinguish between the chordates and non-chordates (5mks)

- g) Compare the water transport (vascular) system of poriferans and the echinoderms (4mks)
- h) What are the features of class Aves which help them in flying (3mks)
- i) Which phylum consists of organisms with cellular level of organization (2mks)

QUESTION 2

Discuss **five** characteristics of the following phylum in the animal kingdom (15mks)

- a) Phylum Porifera
- b) Phylum Platyhelminthes
- c) Phylum Arthropoda

QUESTION 3

Discuss the effects of global warming on both plants and animals (15mks)

QUESTION 4

Describe characteristics of the following divisions of the plant kingdom (15mks)

- a) Angiospermae
- b) Gymnospermae
- c) Pteridophyta

QUESTION 5

Discuss the socio-economic benefits of plants (15mks)