



RONGGO

UNIVERSITY COLLEGE

(A Constituent College of Moi University)

OFFICE OF THE DEPUTY PRINCIPAL- ACADEMICS AND STUDENTS AFFAIRS

UNIVERSITY EXAMINATIONS

2013/2014 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER EXAMINATION

FOR

THE DEGREE

IN

BACHELOR OF SCIENCE

COURSE CODE: ZOO110/121

COURSE TITLE: BASIC ZOOLOGY

DATE: 27/2/2014

TIME: 9.00AM-12.00NOON

INSTRUCTIONS TO CANDIDATES

- Answer ALL questions section A and any TWO questions from section B
- Show workings in the answer booklet for award of full marks
- Do not write on the question paper.
- Switch off your mobile phones.
- Each question should begin on a fresh page
- Marks are shown at the end of each question
- Duration is 3 hours

THIS PAPER CONSISTS (2) PRINTED PAGES

PLEASE TURN OVER

SECTION A (30 MARKS)

QUESTION ONE:

Distinguish between artificial and natural classification

(3 mks)

QUESTION TWO:

Differentiate the following terminologies

(3 mks)

- a) Taxa
- b) Taxonomy
- c) Nomenclature

QUESTION THREE:

Describe the main features of prokaryotes

(3 mks)

QUESTION FOUR:

Differentiate between protozoans and metazoans

(3 mks)

QUESTION FIVE:

Give three advantages of body cavities

(3 mks)

QUESTION SIX:

Differentiate the following terminologies

(3 mks)

- a) Aboral and oral
- b) Caudal and cephalic
- c) Proximal and distal

QUESTION SEVEN:

Distinguish between a polyp and a medusa form

(3 mks)

QUESTION EIGHT:

Identify the common phyla in animals where segmentation is common (3 mks)

QUESTION NINE:

List the main adaptations of insects for life on land

(3 mks)

QUESTION TEN:

List the main sub-phyla of the phylum chordate

(3 mks)

SECTION B(40 MARKS)

QUESTION ELEVEN:

Woese and other scientists used the nucleotide sequence of ribosomal RNA (small subunit) and other RNA and protein sequence as an evolutionary chronometer.

- a) Explain briefly why RNA was used as a good chronometer (10 mks)
- b) Give brief notes of major branches of the metazoan (10 mks)

QUESTION TWELVE:

a) What do you understand by the term symmetry (2 mks)

b) Mention the different types of symmetry in the Kingdom Animalia and their importance (18 mks)

QUESTION THIRTEEN:

Describe in full how fish as chordates have successfully adapted to a life in water (20 mks)

QUESTION FOURTEEN:

Discuss the many adaptations that have accompanied mammals' adaptive radiation (20 mks)