



ALUPE UNIVERSITY
COLLEGE

... Bastion of Knowledge...

P.O.Box 845-50400 Busia(K)

principal@auc.ac.ke

Tel: +254 741 217 185

+254 736 044 469

off Busia-Malaba road

OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2017 /2018 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER REGULAR EXAMINATION



**FOR THE DEGREE OF BACHELOR OF
EDUCATION (SCIENCE)**

COURSE CODE: ZOO 102E

COURSE TITLE: INVETERBRATE ZOOLOGY

DATE: 20TH APRIL, 2018

TIME: 9.00 AM – 12.00 NOON

INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

ZOO 102E: INVETERBRATE ZOOLOGY

STREAM: BED (Science)

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer **ALL** questions from section A and any **THREE** from section B.
 - ii. Diagrams should be used whenever they serve to illustrate the answer.
 - iii. Do not write on the question paper.
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SECTION A (24 MARKS)

Question One

- a) Using illustrations differentiate between asymmetrical, radial and bilateral animal body symmetry. (3Marks)
- b) Describe four important determinants of multicellular body plans. (4 Marks)
- c). Differentiate between metamerism and tagmosis. (2 Marks)
- d). Compare and contrast the distinguishing features between Class Polychaeta, Class Oligochaeta and Class Hirudinea (4 Marks)
- e). What is the meaning of the term metameric segmentation? (1 Mark)

Question Two

- a). List four characteristic features that define the phylum Cnidaria. (4 Marks)
- b). State the nomenclature codes that govern scientific names. (4 Marks)
- c). Using relevant examples, define radial and bilateral symmetry of the animal kingdom. (4 Marks)

SECTION B (36 MARKS)

Question Three

- a). Explain why insects that have undergone adaptive radiations are regarded as successful. (2 Marks)
- b). Explain the diverse cleavage patterns in animals. (10 Marks)

Question Four

- a). Describe the structural and functional composition of nematocysts. (2 Marks)
- b). Members of the Phylum Arthropoda are the most successful living organisms on earth. Discuss. (10 Marks)

Question Five

- a) Explain the advantages of the exoskeleton in arthropods (6 Marks)
- b) Tabulate six characteristic features of class Gastropoda, class Pelycopoda and class Cephalopoda in phylum Mollusca. (6 Marks)

Question Six

- a). Discuss the stages of development between fertilization and hatching in animals. (10 Marks)
- b). Highlight four general characteristics of the phylum Porifera. (2 Marks)

Question Seven

Describe the characteristic features of the following classes:-

- a). Class Hydrozoa (4 Marks)
- b). Class Scyphozoa (4 Marks)
- c). Class Anthozoa (4 Marks)


