



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2015/16 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER
MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE AND BECHALOR
OF BIO-RESOURCE CONSERVATION**


COURSE CODE: SZL 121
COURSE TITLE: HIGHER INVERTEBRATES

DATE: 29th April 2016 **TIME:** 2:00 – 4:00 p.m.

INSTRUCTIONS TO CANDIDATES

Answer question **ONE** [1] and **ANY** other **TWO** [2] questions Question 1 carries 30 marks while the rest contain 20 marks each

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over 

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1. [i] State **three** processes that constitute **embryogenesis** in arthropods. (3 mks).
[ii] Describe the generalized **malacostracan** body morphology. (5mks).
[iii] State what you would regard as the **distinctive** features of **chelicerates**. (4mks).
[iv] List **three** ecological factors that affect growth in higher invertebrates. (3mks).
[v] Explain **sclerotization** process of the integument in copepods. (5mks).
[vi] Describe the role of the **cuticle** to the increased abundance of acarines. [5mks]
[vii] Explain the role of **two** hormones involved in the ecdysis process. [5mks]
2. [a] Describe the **suspension** feeding strategy in crustaceans. (5 mks).
[b] Differentiate between **euryhaline** and **stenohaline** arthropods (5mks).
[c] With examples, distinguish between diphasic and polyphasic life history. (5mks).
[d] Distinguish between **Mullerian** and **Batesian** mimicry. (5mks).
3. [i] Illustrate how metamorphosis in hexapods has led to their present day abundance. (6mks).
[ii] Discuss the **economic** importance of arthropods. (14mks)
4. Discuss the subphylum **uniramia** with special emphasis on the diagnostic morphological features of the different arthropod groups. (20 mks)
5. Describe the **structure** and **biology** of the arthropod integument. (20 mks)