



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2012/2013

**SUPPLEMENTARY EXAMINATION FOR THE PRE-
UNIVERSITY/BRIDGING CERTIFICATE COURSE**

SBIO 0014: INVERTEBRATES

DATE: 8th August, 2013

TIME: 2.00 – 4.00 p.m

INSTRUCTION: - Answer all the questions in Section A (60 Marks) and any two questions from section B (40 Marks). Illustrate answers with labeled diagrams whenever appropriate.

SECTION A (60 Marks)

Answer all the questions in this section

- Q1.** Giving one example for each case, distinguish between coelomate and acoelomate animals.
 - Q2.** Name any five animal phyla stating appropriately on the invertebrate and vertebrate status
 - Q3.** Use specific examples to compare the two types of metamorphoses in insects.
 - Q4.** Insects are known to cause grievous harm to humans and domestic livestock. Explain.
 - Q5.** Explain positive ecological contributions to ecosystems by named arthropods
 - Q6.** Use labeled diagram to show the anatomy of a named cnidarians.
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- Q7. Explain how the structure of the exoskeleton of arthropods is suited to its functions
- Q8. Give one reason each why *Anopheles gambiae* is:
- (a). an insect
 - (b). an invertebrate
 - (c). an arthropod
 - (d). a diptera
- Q9. Many human suffering are known to be caused by arthropods. Explain.
- Q10. Give a brief description of the morphological characteristics of a named platyhelminth.

SECTION B (40 Marks)

Answer **any two questions** from this section

- Q11. Give the general characteristics of the arthropod group and explain any three aspects in which named groups are economically important to humans.
- Q12. With the help of illustrations, compare the two life forms of a named cnidarian organism.
- Q13. Give the general characteristics of mollusks and one specific feature of a named species in each of the following groups; bivalves, cephalopods and gastropods.
- Q14. In terms of evolution, insects are by far the most successful group in the animal kingdom. Discuss the reasons for this success.
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