



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2020/2021 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY AND
BIORESOURCE CONSERVATION AND MANAGEMENT**

COURSE CODE: SZL 114/SZL 111

COURSE TITLE: INVERTEBRATE BIOLOGY/BASIC ZOOLOGY

DATE: 15TH February, 2021. **TIME:** 8:00 -10:00 a.m.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



1. [a] Enumerate two [2] **phases** of a Protozoan life cycle [2marks]
- [b] Differentiate between **encystation** and **excystation**. [3mks]
- [c] List three [3] types of **cnidocytes** [3mks]
- [d] State two [2] functions of a **clitellum** [2mks]
- [e] How does reproduction occur in *Ascaris lumbricoides*? [4mks]
- [f] How are protozoans important in human welfare? [8mks]
- [g] Describe the **strobilation process** in a named **typical cnidarian**. [8mks]

2. [a] Briefly describe the mechanism of functioning of the **protonephridia**. [4mks]
- [b] How does the **triploblastic** body plan in the **turbellarians**? [8mks]
- [c] Cite **three** species of the **schistosomes** and **explain** their **medical** importance. [8mks]

3. [a] Describe **FOUR** taxonomic features of the **poriferans**. [8mks]
- [b] Illustrate the **life cycle** of hookworms. [8mks]
- [c] Show the **damaging effects** of nematodes to both **flora and fauna**. [4mks]

4. [a] State **two** functions of the **trochal disc** in the **rotiferans**. [2mks]
- [b] How have the **cestodes** led to **food insecurity** in the country? [6mks]
- [c] Cite **two** anthozoans. [2mks]
- [d] Describe the distinctive **features** of **molluscs**. [10mks]

5. Classify **annelids** up to **class** level emphasizing their **morphological** features and cite one (1) example in each case. [20mks]