



(Knowledge for Development)

**KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2015/2016 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER
MAIN EXAMINATIONS**

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

COURSE CODE: ESM 113 & ESM 112

COURSE TITLE: SURVEY OF ANIMAL KINGDOM &
FUNDAMENTALS OF BIOLOGY 11

DATE: 2nd May 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



KIBUCO observes ZERO tolerance to examination cheating

1. (a) Explain **two** types of **semiochemicals** utilized by arthropods [4mks]
(b) State **three** roles of a **clitellum** [3mks]
(c) Describe the **lifecycle** of hookworms. [5mks]
(d) State **four** hall marks of chordates. [4 mks]
(e) List **four** examples of echinoderms. [4mks]
(f) State **five** morphological features of poriferans. [5mks]
(g) Explain the **homeostatic** function of pancreas in omnivorous mammals. [5mks]

2. (i) List **three** classes of phylum **cnidaria**. [3mks]
(ii) State **three** (3) species of **Schistosoma** and explain their **medical** importance [9mks]
(iii) Explain **four** values of **protozoans** to human economics. [8 mks]

3. (a) Describe the **five** distinctive features of **Nematodes**. [10mks]
(b) Describe **five** adaptations of **Pisces** to their mode of locomotion. [10mks]

- 4 (i) Reptiles are relatively more **evolved** compared to amphibians. **Discuss.** [10mks]
(ii) Classify **molluscs** into classes emphasizing the morphological features of each class. [10mks]

5. (i) Describe the distinctive features of **annelids**. [10mks]
(ii) Describe the **triploblastic morphology** in platyhelminthes. [10mks]