



RONGGO

UNIVERSITY COLLEGE

(A Constituent College of Moi University)

OFFICE OF THE DEPUTY PRINCIPAL- ACADEMICS AND STUDENTS AFFAIRS

UNIVERSITY EXAMINATIONS

2013/2014 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER EXAMINATION

FOR

THE DEGREE

IN

BACHELOR OF SCIENCE

COURSE CODE: ESB 113

COURSE TITLE: DEVELOPMENTAL BIOLOGY AND PHYSIOLOGY

DATE: 26/6/2014

TIME: 9.00AM-12.00NOON

INSTRUCTIONS TO CANDIDATES

- Answer question ONE and any other FOUR questions
- Show workings in the answer booklet for award of full marks
- Do not write on the question paper.
- Switch off your mobile phones.
- Each question should begin on a fresh page
- Marks are shown at the end of each question
- Duration is 3 hours

THIS PAPER CONSISTS (2) PRINTED PAGES

PLEASE TURN OVER

QUESTION TWO:

Most eukaryotic embryos are comprised of three primary germ layers:

- a) Name the three germ layers and provide one example of an adult tissue derived from each (9 Marks)
- b) State the name for an organism with only two primary germ layers (1 Mark)

QUESTION TWO:

- a) Define endocrine glands (2 Marks)
- b) Describe the functions of endocrine secretions (hormones) in an animal (8 marks)
- c) Explain the importance and significance of reproduction in animals (10 Marks)

QUESTION THREE:

- a) Name the different types of nerve cells (3 Marks)
- b) State the functions of the nervous system (4 Marks)
- c) Distinguish between nervous and endocrine communication in animals (13 Marks)

QUESTION FOUR:

Discuss at least five landmark theories of embryology citing relevant examples in each case (20 Marks)

QUESTION FIVE:

Compare and contrast between the nervous and endocrine communication in animals (20 Marks)

QUESTION SIX:

Explain the role of hormonal system in homeostasis (20 Marks)