



# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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**MAIN EXAMINATION**

**JANUARY – APRIL 2017 TRIMESTER**

**FACULTY OF SCIENCE**

**DEPARTMENT OF BIOLOGY**

**REGULAR PROGRAMME**

**BIO 310: Developmental Biology**

**Date: April 2017**

**Duration: 2 Hours**

**INSTRUCTIONS: Answer Question ONE and any other TWO Questions**

- Q1. (a) In the definition of development biology differentiate between growth and development ( 3 marks)
- (b) Draw a well labeled diagram of human ovum (5 marks)
- (c) Explain cortical reaction and its significance ( 5 marks)
- (d) Differentiate between organogenesis and embryogenesis (4 marks)
- (e) Describe two types of sperms (4 marks)
- (f) Explain functions of various hormones involved in menstrual cycle (5 marks)
- (g) Explain PH and DNA changes during and after fertilization (4 marks)
- Q2. Discuss different stages of regeneration in a limb of a salamander when amputated ( 20 marks)
- Q3. Discuss cleavage as applied in embryology (20 marks)
- Q4. Discuss biological significance of fertilization (20 marks)
- Q5. Compare Oogenesis and Spermatogenesis (20 marks)

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