

University of Buea

*Faculty of
Sciences*



*Department of Plant &
Animal Sciences*

ZOO 401
(EMBRYOLOGY)
FIRST SEMESTER EXAMS (2006-2007)

Friday, 2nd March 2007
15-18h at Classroom 1 & 2

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Instructions: Answer all the Questions in this Section (From 1-7)
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- 1) Outline the different phases of embryonic development (2 marks)
- 2) With the aid of diagrams, compare and contrast the process of spermatogenesis and oogenesis in humans (4 marks).
- 3) List the basic processes involved in fertilization in vertebrates (2 marks).
- 4) Describe concisely the process and the patterns of cleavage in frogs. (3, 3 marks).
- 5) Using specific examples, explain the roles played by the selector genes on the process of morphogenesis as regards to:
 - a) Wing formation in *Drosophila*
 - b) Legs formation in *Drosophila*
 - c) Skeleton formation in mice
 - d) Compound and simple eye formation in insects and vertebrates respectively(2, 2, 2, 2, marks)
- 6) Describe the placenta formation in humans (4 marks)
- 7) List the different organs which as a result of organogenesis are derived from the following parts of the gastrula:
 - a) Ectoderm
 - b) Mesoderm
 - c) Endoderm(1, 3, 1 marks)

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(1, 3, 1 marks)

Good Luck

Dr. Salah A. Martin