

Ollscoil na hÉireann, Gaillimh
NATIONAL UNIVERSITY OF IRELAND, GALWAY
B.Sc. General/Third Science Summer Examination, 2002

Dr. S. McDonald
Dr. B. Wilkins

AN309 Developmental Biology

Time allowed: **TWO** hours

Answer **QUESTION 1** (40 marks) and **THREE others** (20 marks each).

1. "Development is driven by a series of relatively simple processes which can give rise to an incredibly complex mature organism". Discuss with reference to at least three of these processes, citing specific examples of each during human development.
2. Outline the development and role of the notochord during embryogenesis.
3. Discuss meiosis with particular reference to the differences in meiosis between the male and the female.
4. Discuss the development and importance of the placenta.
5. Write an essay on the development of the urinary tract.
6. Outline the key events in the development of the gut **or** the heart.
7. Write notes on:
 - a. Gastrulation
 - b. Neural crest