

NATIONAL UNIVERSITY OF IRELAND, GALWAY  
Ollscoil na hÉireann, Gaillimh

**B.Sc. General/Third Science**  
Summer Examination, 2000

**Anatomy**

Professor J. Folan-Curran

Professor B.J. Moxham

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**Developmental Biology**

**AN309**

Time allowed: Two hours

**Compulsory Question**

1. Define the terms paraxial mesoderm, intermediate mesoderm and lateral plate mesoderm. Choose **one of these** subdivisions of mesoderm and outline the tissues derived.

**Systems Embryology: Answer either Question 2 or Question 3**

- 2 By week four of development each embryo possesses two pairs of genital ducts. What is the fate of these ducts in relation to the development of the male **and** female reproductive tracts.

**or**

3. By week six development of the lengthening midgut can no longer be accommodated in the abdominal cavity. Discuss the sequence of events involved in the development of the midgut.

**Early Development: Answer either Question 4 or Question 5**

- 4 Discuss the importance of the acrosome

**or**

5. The site of implanatation has major effects on future development. Discuss.

**General : Answer ONE of the following three questions:**

6. The fate of the first pharyngeal arch.

**or**

7. The value of WWWeb-based resources in studying development.

**or**

8. A short essay on primitive germ cells.