

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.Sc. (Intercal)

Genetics C201: Human Embryonic Development

COURSE CODE : GENE201

UNIT VALUE : 0.50

DATE : 28-APR-06

TIME : 10.00

TIME ALLOWED : 3 Hours

HUMAN EMBRYONIC DEVELOPMENT – GENE201

28th April 2006

There are two sections to this exam.

The short answer section makes up 25% of the mark for this paper.

The essay section counts for 75% of the mark (25% each essay).

Section 1 - SHORT ANSWER SECTION

This section makes up 25% of your exam mark.

1. Write short notes on ALL of the following:

- a. meiosis
- b. oogenesis
- c. spermatogenesis
- d. brain development
- e. gut development
- f. developmental genes

Section 2 - ESSAY SECTION

Answer THREE essays from this section (25% each).

Each essay counts as 25% of the examination.

1. Describe the *in-vitro* development of an embryo from the zygote to the blastocyst stage.
2. Write an essay on Assisted Reproductive Technologies.
3. Describe the normal and abnormal development of the lungs, emphasising the genes that are involved.
4. Describe the normal and abnormal development of the kidney, emphasising the genes that are involved.
5. Describe the normal and abnormal development of the limbs, emphasising the genes that are involved.
6. Describe the normal and abnormal development of the heart, emphasising the genes that are involved.

END OF PAPER