UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualifications:-

B.Sc.

B.Sc. (Intercal)

Genetics C201: Human Embryonic Development

COURSE CODE

: GENEC201

UNIT VALUE

: 0.50

DATE

: 30-APR-03

TIME

: 14.30

TIME ALLOWED : 3 Hours

HUMAN EMBRYONIC DEVELOPMENT – GENEC201 30th April 2003

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. Fertilisation
 - b. The blastocyst
 - c. Somites
 - d. Lung development
 - e. Kidney development
 - f. Hox genes

Section 2 - ESSAY SECTION

Answer three essays from this section (25% each). Each essay counts as 25% of the examination.

- 1. Outline male and female gametogenesis, paying attention to the differences between them.
- 2. Write an essay on Assisted Reproductive Technologies.
- 3. Describe the events leading to implantation, indicating likely causes of implantation failure.
- 4. Describe the normal and abnormal development of the brain and central nervous system, emphasising the genes that are involved.
- 5. Describe the normal and abnormal development of the heart, emphasising the genes that are involved.
- 6. Describe the normal and abnormal development of the limbs, emphasising the genes that are involved.