

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

B.Sc. (Intercal)

Genetics C201: Human Embryonic Development

COURSE CODE : **GENEC201**

UNIT VALUE : **0.50**

DATE : **29-APR-02**

TIME : **14.30**

TIME ALLOWED : **3 hours**

02-C0492-3-30

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TURN OVER

HUMAN EMBRYONIC DEVELOPMENT – GENE201

29th April 2002

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) The journey of the sperm after ejaculation
 - b) the blastocyst
 - c) the placenta
 - d) embryo folding
 - e) normal heart development
 - f) the limb bud

Section 2 - ESSAY SECTION

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

Each essay counts as 25% of the examination.

1. Describe the genetic aspects of meiosis in humans and discuss the differences in the process between males and females. Explain the critical stages when chromosomal and genetic errors may occur.
2. Outline the current methods used for infertility treatment. What are the advantages and disadvantages of each method?
3. Write an essay on gastrulation.
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 kidneys, emphasising the genes that are involved.
6. Describe the normal and abnormal development of the lungs, emphasising the genes that are involved.

END OF PAPER