

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

M.Sc.

M.Sc. Prenatal Genetics & Fetal Medicine: Human Embryonic Development and Preimplantation Diagnosis

COURSE CODE : PGFM0003

DATE : 30-APR-03

TIME : 14.30

TIME ALLOWED : 3 Hours

MSc in Prenatal Genetics and Fetal Medicine
Human Embryonic Development and
Preimplantation Diagnosis
30th April 2003

There are two sections to this exam.

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

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

Section 1 - SHORT ANSWER SECTION

This section makes up 25% of the examination.

1. Write short notes on ALL of the following

- a. The cleavage stage embryo
- b. Implantation
- c. Gastrulation
- d. *HOX* genes
- e. The structure of the limb bud
- f. Embryo biopsy

Section 2 - ESSAY SECTION

Answer three essays from this section.

Each essay counts for 25% of the examination.

1. Compare and contrast male and female gametogenesis.
2. Write an essay on the current procedures available to help treat the infertile couple.
3. Describe the normal and abnormal development of the heart.
4. Describe TWO of the following:
 - (a) Derivation and potential of embryonic stem cells
 - (b) lung development
 - (c) brain development
5. Write an essay on the current status of preimplantation genetic diagnosis.
What are the advantages and disadvantages of using this procedure?

END OF PAPER