

Ollscoil na hÉireann, Gaillimh
NATIONAL UNIVERSITY OF IRELAND, GALWAY
Summer Examinations, 2002
Second Medical
Dr. S. McDonald
Dr. B. Wilkins
Dr. M. Salgaonkar

Time allowed: Three hours

Questions in Section A are worth 25 marks each. As a guide you should spend 40 minutes on each of these questions.

Questions in Section B, C, D and E are worth 12.5 marks each. As a guide you should spend 20 minutes on each of these questions.

The balance of time (20 mins) is for you to read the paper thoroughly and review your answers at the end.

SECTION A - Compulsory Questions.

Answer **two** questions.

1. Discuss the differences between the blood circulation in the fetus and the adult. Describe briefly congenital defects that may persist in the cardiovascular system and their clinical significance in later life.
2. What are the components of a nephron and what are their histological features. Include a note on the embryological origin of the nephron and its associated collecting tubule.

SECTION B

Systems Anatomy

Answer **one** of the following questions.

1. Write an essay on the muscles of the eyeball including their attachment, innervation and their actions.
2. Write an essay on the abdominal aorta and its branches.

SECTION C

Embryology

Answer **one** of the following questions.

1. Write an essay on the development of the lungs with a brief note on infant respiratory distress syndrome.
2. Write an essay on the development of the thyroid gland with a brief note on anomalies associated with thyroid development..

SECTION D

Histology

Answer **one** of the following questions.

1. Write an essay on the histology of the small intestine.
2. Compare and contrast the histology of the thymus, spleen and lymph nodes.

SECTION E

Clinical Anatomy

Answer **one** of the following questions.

1. Describe the anatomical basis for referred pain with the help of **three** examples.
2. Describe the anatomical basis for differing routes of spread of cancer from an organ with the help of **three** examples.