

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

B.Sc.

Health Sciences HSC36: Podiatric Anatomy and Biomechanics (II)

COURSE CODE : **HESC0036**

UNIT VALUE : **0.50**

DATE : **20-MAY-02**

TIME : **14.30**

TIME ALLOWED : **2 hours**

02-C0689-3-50

© 2002 *University of London*

TURN OVER

BSc (Hons) Podiatry, University College London
HSC 36 PODIATRIC ANATOMY AND BIOMECHANICS UNIT (II)
Second year examination (2 hours)
May 2002

Answer one question from each section.

Answer four questions in total.

Answer each question on a new sheet of paper.

Section A

- 1 Write an essay on the basal ganglia and what they do? Illustrate the answer with labelled diagrams that show the relationship of the basal ganglia to other important structures in the brain and give examples of diseases of the basal ganglia and their symptoms. (20)
- 2 Compare and contrast the sensory systems that relay pain and two-point discriminative touch from lumbosacral spinal cord to the cortex. Use diagrams and give as much detail as possible. (20)

Section B

- 1 Rearfoot varus is a term describing several different conditions.
 - a) Define rearfoot varus. (3)
 - b) Describe the clinical recognition of rearfoot varus and within the answer describe the different types of rearfoot varus. (7)
 - c) Describe the cause of one of the conditions presenting as rearfoot varus. (3)
 - d) Describe the management of a case of rearfoot varus. (7)
- 2 Forefoot varus is normally seen in young children.
 - a) Describe the normal reduction of forefoot varus in children. (8)

Describe the management of a case of forefoot varus in a child. (12)

TURN OVER

Section C Anatomy

- 1 Compare and contrast the Hip and Knee joints. (20)

- 2 With reference to function discuss the anatomy of the medial longitudinal arch. (10)
 Discuss the change in anatomy in the weight-bearing pronated foot. (10)

- 3 Write short notes on:
 - a. The menisci (5)
 - b. The Q angle (5)
 - c. Adductor Hallucis (5)
 - d. The Achilles tendon (5)

Section D Functional Anatomy

- 1 Discuss the action of the foot in gait with reference to the subtalar joint and long axis of the MTJ. What mechanisms ensure that the foot is a rigid lever in the propulsive phase. (20)

- 2 Discuss the intrinsic factors within the lower limb that can cause biomechanical problems (20)

END OF PAPER