UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

B.Sc.

Health Sciences HSC36: Podiatric Anatomy and Biomechanics (II)

COURSE CODE	:	**HESC0036**
UNIT VALUE	:	**0.50**
DATE	:	**16-MAY-06**
TIME	:	**10.00**
TIME ALLOWED	:	**2 Hours**

TURN OVER

HSC36 PODIATRIC ANATOMY AND BIOMECHANICS UNIT (II)
Second year examination (2 hours)
May 2006

Answer one question from each section.
Answer four questions in total.
Answer each question in a new answer booklet.
Write your candidate number on each answer booklet

Section A Neuroanatomy

1 a) Describe with the aid of diagrams the arterial supply to the brain. (10)

b) Discuss why occlusion of the middle cerebral artery may lead to sensory and motor deficits and describe the affects on the upper and lower limbs. (10)

2 Describe in detail and with the aid of diagrams the anatomy of the spinal cord. (20)

Section B Pathomechanics

1 Forefoot varus is a common aetiology of Posterior tibial tendon dysfunction. Discuss this statement. (20)

2 a) Explain the term "compensatory sub talar joint pronation" and discuss why it occurs. (12)

b) Discuss why compensatory pronation may be symptomatic or asymptomatic. (8)

TURN OVER

Section C Anatomy

1 a) Describe the anatomy of the ankle joint. Include both bony and soft tissue structures in your answer. (15)

b) Discuss why lateral ankle sprains are a common ankle injury. (5)

2 Discuss why heel pain is a common presenting complaint. Include detailed discussion of the relevant anatomy in your answer. (20)

3 a) Describe in detail the anatomy of the 1st MTPJ and Hallux. (10)

b) Discuss how the action of the muscles that insert upon the Hallux allow normal function. (10)

Section D Functional Anatomy

1 a) With reference to function, discuss the anatomy of the medial longitudinal arch. (10)

b) Discuss the change in anatomy in the weight-bearing pronated foot. (10)

2 a) Discuss the action of the foot in the stance phase of gait with reference to the subtalar joint and long axis of the MTJ. (14)

b) What mechanisms ensure that the foot is a rigid lever in the propulsive phase? (6)

END OF PAPER