



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
SECOND EXAMINATION FOR MEDICAL DEGREES MARCH 2009.

ANATOMY PAPER II

THREE HOURS

MONDAY 16TH MARCH 2009

Answer all FIVE Questions

Answer EACH QUESTION in a SEPARATE BOOK

Use diagrams where necessary

1.
 - 1.1 Describe the factors involved in the stability of the shoulder joint. (30 marks)
 - 1.2 Describe the histological appearance of a sebaceous gland using a diagram. (30 marks)
 - 1.3 Explain the clinical findings of median nerve injury at the wrist. (30 marks)
 - 1.4 List the bones of the hand. (10 marks)

2. A 16 year old girl was admitted to the hospital with a stab injury to the left lower thorax. The knife penetrated above the 10th rib at the posterior axillary line into the peritoneal cavity. In the hospital an immediate splenectomy had to be done.
 - 2.1 List the structures that could be damaged in this injury (25 marks)
 - 2.2 Explain possible complications that could arise in the thorax due to this injury. (25 marks)
 - 2.3 Describe briefly the development of the spleen. (25 marks)
 - 2.4 Describe the light microscopic appearance of the spleen using a labelled diagram. (25 marks)

3. A 23 years old patient presented to the eye clinic. On examination, the patient had complete ptosis with a dilated pupil on the left. The eye ball on the same side was deviated downwards and laterally. Investigations revealed that his left posterior cerebral artery has an aneurysm closer to the posterior communicating artery.
 - 3.1 Using your knowledge of anatomy, answer the followings.
 - 3.1.1 Name the structure that produces the above signs and symptoms due to compression by the aneurysm. (10 marks)
 - 3.1.2 State the anatomical basis for the above signs and symptoms (underlined). (40 marks)
 - 3.1.3 Describe the neurological pathway involved in the accommodation reflex. (35 marks)
 - 3.2 Discuss briefly the light microscopic appearance of a peripheral nerve. (15 marks)

4. A forty year old male consults a surgeon for a complaint of bleeding per rectum on and off, soft lump appearing at the anus when straining at defecation and a feeling of incomplete emptying after defecation. Per rectal examination by the surgeon gave negative results. The patient was then subjected to a proctoscopy by the Surgeon. With the patient in lithotomy position the surgeon observed two small lumps at 3, 7 and a large lump at 11 O'clock positions in the anus.
 - 4.1 With the knowledge of anatomy explain the basis for the symptoms and signs (underlined). (40 marks)
 - 4.2 List the organs/structures a doctor could feel in the anterior wall of the ano-rectal canal in a male, when performing a per-rectal examination. (30 marks)
 - 4.3 Describe the embryology of the region in question. (30 marks)

5. 5.1. Classify the glands giving examples (15 marks)
5.2. Write an account of the gross anatomy of the parotid gland. (35 marks)
5.3. Explain the clinical manifestation of a patient with a calculus in the parotid duct. (25 marks)
5.4. Describe the development of the palate. (25 marks)