### POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

# MD (ORTHOPAEDIC SURGERY) EXAMINATION AUGUST 2011

Date :-  $1^{st}$  August 2011 Time ; 2.00 p.m. -4.00 p.m.

#### PAPER 1

#### Answer all four questions.

Answer each question in a separate book.

- 1.
- 1.1. Briefly describe how an autologous bonwe graft works.
- 1.2. Discuss the types of autografts and alternatives to autografts available.
- 1.3. What are the indications for autografts and graft substitutes in orthopaedic practice..
- 1.4. Describe the properties of an ideal bone graft substitute.
- 2. Discuss Venous thrombo-prophylaxis in elective orthopaedic surgery.
- 3.
- 3.1. Describe the blood supply to the Talus and its clinical significance.
- 3.2. Discuss the principles of management of talar neck fracture.
- 3.3. What role does Radio-nuclide bone scan have in clinical decision maki8ng in this injury?
- 3.4. What is the clinical relevance of Hawkins' sign in plan x-ray examination in the follow up of patients with with talar neck fractures.
- 4.
- 4.1. Enumerate the problems of the rheumatoid hand.
- 4.2. Outline its non surgical management.
- 4.3. Outline its surgical management.

# POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

# MD (ORTHOPAEDIC SURGERY) EXAMINATION AUGUST 2011

Date :- 2<sup>nd</sup> August 2011 Time : 9.30 a.m. – 11.30 a.m.

#### PAPER 1I

#### Answer all four questions.

Answer each question in a separate book.

- 1. A 26 yr old male has sustained a twisting injury to the right ankle causing malleolar fractures.
  - 1.1. Outline the features on plain X-ray that would influence your definitive management ?
  - 1.2. List the possible complications associated with this injury.
  - 1.3. Briefly describe the steps to avoid these complications.
- 2. A 58 years old diabetic female presented with persistent back pain of thoralumbar region with girdle type radiating pain of one and half months duration. She also had mild evening pyrexia and loss of weight. She had taken treatment from the G.P. during this period which gave her temporary pain relief. On examination, there was tenderness in the thoraco-lumber region with restriction of spinal movements due to paraspinal muscle spasm.
  - 2.1. List five differential diagnosis.
  - 2.2. Discuss the investigations you would order to arrive at a diagnosis.
  - 2.3. Outline the plan of management of Tuberculosis of the spine including indications for surgical intervention.

- 3. A 22 year old rugby player emerges from a scrum holding his right forearm away from the side of his chest. He reports that he felt a pop / crack in the shoulder region when the scrum collapsed and since then the right arm is weak, tingling and a bit numb.
  - 3.1. Discuss your differential diagnosis?
  - 3.2. Describe your clinical assessment and investigations.
- 4. A 55 year old female presents with a painful left hip of longstanding and associated left leg shortening since childhood. In the past twelve months she has experienced increasing left low back, hip, groin and thigh pain, particularly by the end of her day's work. During this period she describes a feeling of gritty clicking with left hip movement.
  - 4.1. Describe your physical examination and expected findings.
  - 4.2. What are your differential diagnosis and what would you expect to see on plain X-ray of the pelvis and left hip?
  - 4.3. In the situation where conservative measures failed to control her symptoms, what options can we offer this lady for interventional treatment, if her pain reaches intolerable levels?