

**UNIVERSITY COLLEGE LONDON**

**UNIVERSITY OF LONDON**

**EXAMINATION FOR INTERNAL STUDENTS**

**FOR THE FOLLOWING QUALIFICATIONS:**

**M.Sc.**

**M.Sc. Orthopaedics: Paper II (Orthopaedics)**

<b>COURSE CODE</b>	<b>:</b>	<b>ORTH0002</b>
<b>DATE</b>	<b>:</b>	<b>07-SEP-04</b>
<b>TIME</b>	<b>:</b>	<b>10.00</b>
<b>TIME ALLOWED</b>	<b>:</b>	<b>3 Hours</b>

Answer **FOUR** questions out of **FIVE**  
(maximum of 20 marks for each answer)

Answer **EACH** question in a **SEPARATE** book

1. A 21 year old male presents with a 6 month history of a right knee pain associated with an expanding mass in the distal femur. Plain radiographs suggest a malignant primary bone tumour.
  - a) What are the radiological features that suggest a bone lesion is malignant rather than benign? (3 marks)
  - b) What is the incidence of malignant primary bone tumours? (2 marks)
  - c) What is the differential diagnosis in this case? (2 marks)
  - d) How do you clinically stage a bone sarcoma. Use your answer to outline the biological behaviour of sarcomas and how they spread. (5 marks)
  - e) Describe the management of this patient with an osteosarcoma without evidence of distal spread. (5 marks)
  - f) Which tumours most commonly metastasise to bone? (3 marks)
  
2. A 72 year old female has a painful left hip 1 year after a cemented Charnley total hip replacement.
  - a) What is the differential diagnosis? (2 marks)
  - b) What are the risk factors for infection following arthroplasty surgery? (3 marks)
  - c) How would you investigate this patient? (5 marks)
  - d) How would you treat this patient with a proven *s. epidermidis* infection in this hip? (5 marks)
  - e) What can be done to minimise the risks of post-operative infection? (5 marks)

3. A 50-year old woman presents in clinic with a painful bunion.
- a) What is your differential diagnosis? (2 marks)
  - b) Discuss non-operative treatment (5 marks)
  - c) Describe indications for surgery (4 marks)
  - d) Outline your protocol of post-operative care (4 marks)
  - e) Describe complications of surgery (5 marks)
4. Write short notes on **four** of the following:
- a) Complications of arthroscopy of the knee (5 marks)
  - b) Paget's disease of bone (5 marks)
  - c) Pulmonary embolism (5 marks)
  - d) Dupuytren's contracture (5 marks)
  - e) Neurofibromatosis Type 1 (von Recklinghausen's disease) (5 marks)
  - f) Complications from use of tourniquet in orthopaedic surgery (5 marks)
5. A 5-year old girl attends your clinic with a limp of three months' duration.
- a) What is your differential diagnosis? (4 marks)
  - b) Assuming the limp is related to hip pathology, list the key questions that you would ask when obtaining a history (6 marks)
  - c) What immediate investigations would you request? (2 marks)
  - d) After initial investigation how would you further manage this patient? (8 marks)