**KENYA MEDICAL TRAINING COLLEGE – NYAMIRA**

**END OF YEAR THREE SEMESTER ONE EXAMINATION**

**MARCH 2013 KRCHN CLASS (PRE-SERVICE)**

**ORTHOPAEDICS EXAMINATION**

DATE: 10/9/2015 TIME 1.30 – 4.30 pm

**INSTRUCTIONS**

1. Read the questions carefully and answer only what is asked.
2. Enter your examination number and question number on each page used.
3. ALL questions are compulsory.
4. For part 1 (MCQs), write the answer in the spaces provided on the answer booklet and each MCQ is one (1) mark.
5. For Part 2 (SHORT ANSWER QUESTIONS), answer the questions following each other.
6. For Part 3 (LONG ANSWER QUESTIONS), answer to each question MUST start on a separate page.
7. Omission of and or wrong numbering of a question or part of the question will result in 10% deduction of the marks scored from the relevant part.
8. Do NOT use a pencil.
9. Mobile phones are NOT allowed in the examination hall.

For Examiner:

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| --- | --- | --- | --- | --- |
| **MCQS** | **SAQS** | **LAQS 1** | **LAQS 2** | **TOTAL** |
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**PART ONE: MCQS (MULTIPLE CHOICE QUESTIONS) ORTHOPAEDICS– 10 MARKS**

Q.1. The patella is an example of:

1. Flat bones.
2. Irregular bones.
3. Sexamoid bones.
4. Short bones.

Q.2. Flat bones develop from which type of rods of cartilage?

1. Cartilage models.
2. Membrane models.
3. Tendon models.
4. Rods of cartilage.

Q.3. A congenital disorder in which bones are abnormally soft and brittle is called:

1. Flagilitas ossium.
2. Flagilitas perfecta.
3. Marked deformities.
4. Ligamentous laxity.

Q.4. Which one of the following statements is TRUE about arthrodesis?

1. Is the operation for construction of a new moveable joint.
2. It is a method where one or both of the articular ends of the bones are simply excised so that a gap is created between them effectively creating a false joint.
3. It is a surgical process where articulating surfaces are excised and replaced by prosthetic components.
4. Is a surgical fusion of a joint by removing the diseased joint surfaces.

Q.5. One of the conditions below is characterized by loss of the normal bone density:

1. Osteoporosis.
2. Osteomyelitis.
3. Rheumatic arthritis.
4. Flagilitus ossium.

Q.6. The respective names given to a chondrosarcoma of the bone if it develops in the interior of the bone and the surface of the bone is called:

1. Osteosarcoma and myeloma respectively.
2. Primary sarcoma and plasmacytoma respectively.
3. Central and peripheral chondrosacroma respectively.
4. Ewing’s tumour and endothelial sarcoma respectively.

**PART ONE: MCQS (MULTIPLE CHOICE QUESTIONS) ORTHOPAEDICS– 10 MARKS**

Q.7. In the treatment of fractures, which of the following is true?

1. The patient is supported by developing a temporary means like a splint or surgical appliances like walking calipers.
2. The deformity caused by fracture can be angular and hence shortening of limb can be manipulative.
3. Blood for full blood count is done to assess the haemoglobin level after trauma.
4. Rehabilitation must be started immediately the fracture occurs.

Q.8. In pyogenic arthritis, when pus is formed within the joint, the condition is sometimes referred to as:

1. Infective arthritis.
2. Suppurative arthritis.
3. Rheumatoid arthritis.
4. Osteoarthritis.

Q.9. When rheumatoid arthritis affects several joints, at the same time, it is referred to as:

1. Antoimmune.
2. Symmetrical arthritis.
3. Polyarthritis.
4. All of the above.

Q.10. One of the following is true about risks associated with amputation:

1. Serious traumatic injuries increases risks of complications.
2. Laboratory blood tests should be done to avoid conditions like diabetes.
3. If patient is not introduced to the physiotherapist who will be involved in the post- operative care, then patient is at high chances of developing complications.
4. None of the above.

**PART TWO: SHORT ANSWER QUESTIONS – ORTHOPAEDICS – 30 MARKS**

Q.1. (a) Briefly explain the three (3) main causes of fractures. 6 marks

(b) State two (2) distinct classifications of osteomyelitis. 2 marks

(c) Name two (2) causative organisms for osteomyelitis in adolescents. 1 marks

1. List four (4) complications of acute haematogenous osteomyelitis. 1 mark

Q.2. Define the following terms:

1. (i) Osteomyelitis complicating open fracture.

(ii) Myeloma.

(iii) Fracture. 3 marks

1. State three (3) types of hormones that regulate the growth, size and shape

of bones. 6 marks

1. Name the rods of cartilage from which all types of bones develop from. 1½ marks
2. Outline the two (2) classifications of fracture. 2 marks
3. Briefly explain the management of osteoporosis. 7½ marks

**PART THREE: LONG ANSWER QUESTIONS – ORTHOPAEDICS – 40 MARKS**

Q.1. Mary has been admitted to orthopaedic ward following a fall sustaining a fracture femur.

1. Draw a well labelled diagram of the long bone. 5 marks
2. Name ten (10) types of bone fractures. 5 marks
3. Explain the healing process of a fractured bone. 10 marks

Q.2. John, who is 13 years old, has chronic infections of the right limb that does not respond to antibiotics or surgical debridement. He is for amputation of the affected leg.

1. Name two (2) examples of amputations that are done above the knee. 1 mark
2. John is for amputation. Describe in detail the pre-operative and post-operative management. 15 marks
3. Name four (4) complications of amputation. 4 marks