**KENYA MEDICAL TRAINING COLLEGE – NYAMIRA**

**END OF YEAR THREE SEMESTER ONE EXAMINATION**

**MARCH 2016 KRCHN CLASS (PRE-SERVICE)**

**ORTHOPAEDICS EXAMINATION**

DATE: …………………… TIME:…………………..

**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** |
|  |  |  |  |  |

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

Q.1. The following are causes of Ankylosis:

1. Genetic factors, fracture and injury, bone deformity
2. Genetic factors, infection, immobility
3. Immobility infection, scoliosis
4. Scoliosis, infection, spina bifida

Q.2. A fascia is:

1. A tough membrane that covers structures
2. A membrane that covers the muscle
3. A membrane that is soft, thin and easily tears
4. A membrane that stretches and expands

Q,3, Permanent injury to nerves and muscles that can dramatically impair function of muscles is called:

1. Ischemia
2. Fasciotomy
3. Compartment syndrome
4. Volkmann’s ischemia

Q.4. The following bone cells are specifically found where there is active growth, repair or remodeling:

1. Osteoclasts and osteocytes
2. Osteoblasts and osteoclasts
3. Osteocytes and osteoblasts
4. Osteocytes, osteoclasts and osteoblasts

Q.5. Subluxation is:

1. A considerable soft tissue damage including the ligaments, nerves and blood vessels
2. Age, smoking
3. Autoimmune diseases
4. Eating disorders and genetic factors
5. Excessive alcohol intake

Q.6. Which of the following type of a bone cells that secretes a substance which when deposited in the area of a fracture, results into formation of a Collins?

1. Osteoblasts
2. Osteoids
3. Collagen
4. Osteocytes

Q.7. The main problems associated with fractures of the shaft of the long bone are:

1. Soft tissues damage, deformity, immobilization
2. Complications, non-union, malunion
3. Changed walking gaite, abnormal anatomical position, deformity
4. Deformity, shortening, stiffness

Q.8. One of the following is a modifiable risk factor for developing osteoporosis:

1. Age, smoking
2. Autoimmune diseases
3. Eating disorders and genetic factors
4. Excessive alcohol intake

Q.9. Osteoarthritis is:

1. Not a systemic disorder
2. Of sudden onset
3. Not associated with congenital anomalies
4. Not caused by genetic changes in the joint cartilage which results in accelerated breakdown of articular cartilage

Q.10. In arthritis, when four or more joints are involved, the arthritis is called:

1. Polyarthritis
2. Arthralgia
3. Oligoarthritis
4. Monoarthritis

**PART TWO : SAQ (SHORT ANSWER QUESTIONS) ORTHOPAEDICS – MARKS**

Q.1. State three (3) types of bone cells 3 marks

Q.2. Outline four (4) main causes of dislocation 4 marks

Q.3. Describe briefly the treatment of dislocation 5 marks

Q.4. Explain two (2) main types of osteomyelitis 2 marks

Q.5. Draw a neat and well labelled diagram of a partially sectioned mature long bone 6 marks

Q.6. Define the following terms:

1. Compartment syndrome 2 marks
2. Arthritis 2 marks

Q.7. (a) State the function of acetabular labrum 2 marks

1. Name four (4) purposes/advantages of plaster of Paris 4 marks

**PART THREE: LAQ (LONG ANSWER QUESTIONS) ORTHOPAEDICS – 20 MARKS**

Q.1. Mr Z, aged 30 years and a civil servant is brought to the ward for admission following a fracture of femur as a result of a fall at his work place.

1. Draw a well labelled diagram of the left femur (Posterior view) 5 marks
2. Mr Z, is to be put on traction.
3. Name two (2) types of traction 1 mark
4. Describe the after care management for Mr Z 5 marks
5. State four (4) complications of traction 2 marks
6. Explain the nursing care management for Mr Z 5 marks
7. State four (4) preventive measures of the complications that Mr Z may develop. 4 marks