



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER DECEMBER 2023 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 313 MEDICAL-SURGICAL NURSING III

DATE: 7-DECEMBER-2023

Duration: 2 HOURS

Start: 9:00 AM

Finish: 11:00 AM

INSTRUCTIONS

1. This exam is out of 70 marks
2. This Examination comprises THREE Sections. Section I: Multiple Choice Questions (20 marks)
Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
3. Answer ALL Questions.
4. Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION I: MULTIPLE CHOICE QUESTIONS**(20 MARKS)**

1. The bone matrix does not store: -
 - A. Calcium,
 - B. Phosphorus,
 - C. Magnesium
 - D. Chloride
2. An example of irregular bone is: -
 - A. Vertebrae
 - B. Sternum
 - C. Metacarpals
 - D. Femur
3. The following is responsible for longitudinal growth in children: -
 - A. Cancellous bone
 - B. Cortical bones
 - C. Epiphyseal plate
 - D. Diaphysis plate
4. Bone formation is primarily a function of: -
 - A. Osteoclasts
 - B. Osteoblasts
 - C. Osteocytes
 - D. Glycoproteins
5. The following is not a determining factor between bone formation and bone resorption: -
 - A. Local stress,
 - B. vitamin C,
 - C. Parathyroid hormone,
 - D. Calcitonin,
6. The following is not a diarthrosis: -
 - A. Ball and socket
 - B. Hinge joint
 - C. Saddle joint
 - D. Symphysis pubis joint
7. State of readiness in the muscle to respond to contraction stimuli is termed as: -
 - A. Muscle flaccid
 - B. Muscle spastic
 - C. Muscle tonus
 - D. Muscle atonic
8. An increased forward curvature of the spine is : -
 - A. Scoliosis
 - B. Lordosis
 - C. Kyphosis
 - D. Gaitosis

9. Obtaining synovial fluid for purposes of examination or to relieve pain due to effusion is termed as: -
- A. Biopsy
 - B. Electromyography
 - C. Hemarthrosis
 - D. Arthrocentesis
10. Cast that encloses trunk and lower extremity is: -
- A. Hip spica cast
 - B. Body cast
 - C. Long leg cast
 - D. Walking cast
11. The following is not an aim of traction: -
- A. Maximize muscle spasms;
 - B. Reduce, align, and immobilize fractures;
 - C. Reduce deformity;
 - D. Increase space between opposing surfaces.
12. The following is not a manifestation of circulatory impairment in fracture management: -
- A. warm skin temperature,
 - B. Decreased peripheral pulses,
 - C. Slow capillary refill time,
 - D. Bluish skin
13. Low back pain: -
- A. Upper lumbar disks, L2–L3 and L4–S1, are subject to the greatest mechanical stress and the greatest degenerative changes.
 - B. Lower lumbar disks, L4–L5 and L5–S1, are subject to the greatest mechanical stress and the greatest degenerative changes.
 - C. Upper lumbar disks, L1–L2 and L5–S1, are subject to the greatest mechanical stress and the greatest degenerative changes.
 - D. Lower lumbar disks, L6–S1, are subject to the greatest mechanical stress and the greatest degenerative changes.
14. Impingement syndrome is: -
- A. Overuse and micro-trauma in the wrist joint
 - B. Overuse and micro-trauma in the elbow joint
 - C. Overuse and micro-trauma in the knee joint
 - D. Overuse and micro-trauma in the shoulder joint
15. Carpal tunnel syndrome: -
- A. Occurs when the median nerve at the wrist is compressed by a thickened flexor tendon sheath, skeletal encroachment, edema, or a soft tissue mass.
 - B. Occurs when the ulnar nerve at the wrist is compressed by a thickened flexor tendon sheath, skeletal encroachment, edema, or a soft tissue mass.
 - C. Occurs when the musculocutaneous nerve at the wrist is compressed by a thickened flexor tendon sheath, skeletal encroachment, edema, or a soft tissue mass.
 - D. Occurs when the radial nerve at the wrist is compressed by a thickened flexor tendon sheath, skeletal encroachment, edema, or a soft tissue mass.

16. Slowly progressive contracture of the palmar fascia, which causes flexion of the fourth and fifth fingers is: -
- A. Tunnel syndrome
 - B. Dupuytren's contracture
 - C. Ganglion
 - D. Carpal syndrome
17. The following is responsible for age related loss of bone mass: -
- A. Calcitonin
 - B. Estrogen
 - C. Testosterone
 - D. Parathyroid hormone
18. Osteomalacia results in: -
- A. Increased calcium absorption.
 - B. Increased calcium and phosphate in the extracellular fluid.
 - C. Deficiency of calcitriol.
 - D. Deficiency of calcitonin
19. Localized rapid bone turnover results to: -
- A. Pagets disease
 - B. Osteomyelitis
 - C. Arthritis
 - D. Chondrogenic disease
20. Microscopic, incomplete muscle tears with some bleeding into the tissue is: -
- A. Contusions
 - B. Strains
 - C. Sprains
 - D. Meniscal injuries

SECTION II: SHORT ANSWER QUESTIONS (30 MARKS)

1. Outline FIVE (5) causes of acute low back pain (5 Mark)
2. Explain the pathophysiology of the Carpal tunnel syndrome (4 Marks)
3. Outline the age-related changes that are responsible for development of osteoporosis (5 Marks)
4. a) Outline FIVE (5) complications associated with arthroscopy (5 Marks)
b) State FIVE (5) nursing intervention for a patient post arthroscopy (5 Marks)
5. Outline SIX (6) potential complications a nurse should monitor for a patient in a cast as a musculoskeletal care modality intervention (6 Marks)

SECTION III: LONG ANSWER QUESTION – (20 MARKS)

1. Mr. S, is brought to the hospital casualty having been involved in a road traffic accident, on examination there is loss of functionality of lower limb with oedema distal to the knee joint with severe pain, x-ray examination reveals a complete fracture tibia fibula:
- a) State FIVE (5) early complications Mr. S is likely to develop (5mks)
 - b) Describe the emergency management of Mr. S while in casualty (10mks)
 - c) Outline FIVE (5) factors that impair fracture healing (5mks)

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