



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER AUGUST 2026 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 313: Medical Surgical Nursing III

DATE: 3RD AUGUST 2026

Duration: 2 HOURS

Start: 9AM

Finish: 11AM

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 A MCQ

1. The major treatment techniques for lower limb fractures is: –
 - A. Closed reduction with casting.
 - B. Internal fixation.
 - C. External fixation
 - D. Immobilization with compression and elevation .
2. If closed reduction is used, the patient may wear a cast
 - A. 6 to 10 weeks.
 - B. 4 weeks
 - C. 3 weeks then bed rest
 - D. Cast is not needed
3. A 65-year-old diabetic patient with an open tibial fracture requires surgical fixation. The most appropriate prophylactic antibiotic regimen is:
 - A. Oral amoxicillin 7 days before surgery
 - B. IV cefazolin within 60 minutes before incision
 - C. IV metronidazole after wound closure
 - D. No prophylaxis required
4. The most critical step in designing a comprehensive orthopaedic treatment plan is:
 - A. Immediate surgical fixation
 - B. Radiological confirmation only
 - C. Detailed neurovascular assessment
 - D. mobilization with imaging
5. The following are nurse action to patient with cast except
 - A. Monitor neurovascular status every hour for first 24 hrs and assess pain.
 - B. Apply ice for 24 to 48 hr.
 - C. Handle a plaster cast with the palms, not fingertips, until the cast is dry to prevent denting the cast.
 - D. Immobilize the cast
6. All are goals of traction except:–
 - A. Prevent soft tissue injury
 - B. Mobilizes the affected area
 - C. Decrease muscle spasms and pain
 - D. Correct or prevent further deformities
7. One of the following is true about oral neoplasm
 - A. There are usually painless at early stages
 - B. Tongue is never affected
 - C. Prognosis is good
 - D. Biopsy is taken for any ulcer which persist for more than 4 weeks

8. After a computer tomography scan with intravenous contrast medium, a client returns to the unit complaining of shortness of breath and itching. The nurse should be prepared to treat the client for:
- A. An anaphylactic reaction to the dye
 - B. Inflammation from the extravasation of fluid during injection.
 - C. Fluid overload from the volume of the infusions
 - D. A normal reaction to the stress of the diagnostic procedure
9. Stimulation of osteoblasts and inhibition of osteoclasts is under influence of;
- A. Progesterone
 - B. Estrogen
 - C. Parathyroid hormone
 - D. Testosterone
10. The hallmark radiologic feature of osteogenesis imperfecta is:
- A. Sunburst appearance
 - B. Codman triangle
 - C. Multiple healed fractures
 - D. Onion-skin appearance
11. Achondroplasia is caused by mutation in:
- A. COL1A1 gene
 - B. FGFR3 gene
 - C. RANKL gene
 - D. PTH receptor gene
12. A patient with rheumatoid arthritis is likely to have:
- A. Asymmetrical joint involvement
 - B. Symmetrical joint involvement
 - C. Only large joints involved
 - D. No inflammation
13. The microscopic functioning unit of mature cortical bone is
- A. Lamella
 - B. Osteon
 - C. Lacunae
 - D. canaliculi
14. Destruction of hyaline cartilage is;
- A. Cartillogious
 - B. Chondrolysis
 - C. Bursitis
 - D. Tendonitis
15. Stimulation of osteoblasts and inhibition of osteoclasts is under influence of:-
- A. Progesterone
 - B. Estrogen
 - C. Parathyroid hormone
 - D. Testosterone

16. When completing the history and physical examination of a client diagnosed with osteoarthritis, which of the following would the nurse assess
 - A. Anemia
 - B. Osteoporosis
 - C. Weight loss
 - D. Local joint pain
17. Excessive osteoclastic activity leads to
 - A. pagets deisease
 - B. osteoporosis
 - C. ostomalacia
 - D. brittle bones
18. The treatement of choice for 65 years old with fracture is
 - A. Close reduction
 - B. Close reduction with internal fixation
 - C. Open reduction
 - D. Replacement of the head and neck of the femur with prosthesis
19. Achondroplasia is characterized by:
 - A. Short limbs with normal trunk
 - B. Long limbs
 - C. Fragile bones
 - D. Curved spine only
20. One of the following conditions is associated with bone infection by Mycobacterium tuberculosis?
 - A. Osteosarcoma
 - B. Pott's disease
 - C. Gout
 - D. Rickets

SECTION B SHORT ANSWER QUESTIONS (30 MARKS)

1. State 6 nurse's action to a patient with cast (6 marks)
2. Outline 6 managements measures for patient with bursitis (6 marks)
3. State 6 nursing care for patient on traction (6 marks)
4. Describe pathophysiology of osteoarthritis injury (6 marks)
5. Explain any 3 factors the hinders bone healing (6 marks)

SECTION C LONG ANSWER QUESTIONS (40 MARKS)

1. Mr. Hassan admitted with a diagnosis of osteomyelitis
 - a. Describe the pathophysiology of chronic osteomyelitis (7 marks)
 - b. Formulate 4 actual nursing diagnoses and one intervention for each (6 marks)
 - c. Outline 7 preventive measures for osteomyelitis (7 marks)