



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES**

DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES

BACHELOR OF SCIENCE IN NURSING (UPGRADING)

END OF SEMESTER EXAMINATIONS, APRIL 2026

COURSE UNIT: BSN 226: Medical- Surgical Nursing III-IV

Date: 8TH APRIL 2026 START: 9:00AM

STOP:11:00AM

Instructions

- 1) This paper has three sections: Section A, Section B and Section C
- 2) Answer **ALL** questions in Section A and Section B and C
- 3) Use the University examination booklets provided
- 4) Re-writing the questions on your answer sheet is unnecessary

SECTION I: MULTIPLE CHOICE QUESTIONS (20 MARKS)

1. Osteochondromas are;
 - a. Benign tumors arising from cartilage and affecting the femur and tibia
 - b. Encapsulated tumors of cartilage that affect small bones of the hands and feet
 - c. Localized bone lesions affecting persons under age 20
 - d. Benign tumors that mainly affect the skull and Para nasal sinuses
2. A patient is scheduled for a total hip replacement due to severe osteoarthritis. The nurse is conducting her preoperative assessment. One of the factors that is most important to assess preoperatively is;
 - a. Dietary habits
 - b. History of deep vein thrombosis
 - c. Range of motion
 - d. Hygiene
3. A 20-year-old male presents with pain in his left femur, swelling, and a palpable mass. Imaging reveals a bone tumor. The clinician would likely make a diagnosis of;
 - a. Osteoporosis
 - b. Osteosarcoma
 - c. Osteoderma
 - d. Osteophytes
4. Major causes of osteogenic sarcoma include;
 - a. Repeated trauma
 - b. Genetical predisposition
 - c. Viral infections
 - d. Haemarthrosis
5. A patient who has undergone lumbar spine surgery asks when they can begin ambulating. The nurse's most appropriate response should be;
 - a. "Wait until the surgeon provides specific instructions."
 - b. "You can begin ambulating tomorrow."
 - c. "You will need to wait at least a week."
 - d. "You can start walking immediately."
6. Hormones whose imbalances may affect the bone structure include;
 - e. Aldosterone and Cortisol
 - a. Epinephrine and Calcitriol
 - b. Parathyroid and Renin
 - c. Calcitonin and oestrogen
7. A 30-year-old patient with a fractured femur in a cast complains of increasing pain unrelieved by analgesics and feels a "tightness" in the leg. The nurse's immediate action would be to;
 - a. Apply ice to the affected area
 - b. Loosen the cast and notify the surgeon
 - c. Elevate the leg
 - d. Administer a higher dose of analgesics
8. A patient scheduled for orthopedic surgery expresses anxiety about postoperative pain. Nursing intervention that is most appropriate to reduce anxiety will be to;
 - a. Provide detailed information about the surgery

- b. Suggest the patient avoid thinking about the surgery
 - c. Encourage the patient to talk to other patients
 - d. Offer reassurance that pain will be well-managed
9. Five days post fracture reduction, a patient presents with a fever, redness, and warmth around the surgical site. The nurse's priority action will be to;
- a. Administer pain medication
 - b. Apply cold compresses to the site
 - c. Obtain a wound culture and notify the physician
 - d. Encourage the patient to ambulate
10. A patient is undergoing an evaluation for suspected glaucoma. The physician wants to assess the angle of the anterior chamber. The most appropriate diagnostic procedure would be;
- a. Gonioscopy
 - b. Tonometry
 - c. Perimetry
 - d. Slit-lamp examination
11. A 68-year-old patient is diagnosed with open-angle glaucoma. The physician prescribes a topical medication. The class of medication commonly prescribed for the initial management of open-angle glaucoma is;
- a. Anticholinergics
 - b. Antivirals
 - c. Beta-blockers
 - d. Corticosteroids
12. Madam S reports difficulty seeing distant objects, but she can read close numbers without any issues. Madam S could be suffering from;
- a. Hyperopia
 - b. Astigmatism
 - c. Presbyopia
 - d. Myopia
13. A patient presents with pain, redness, and swelling in the inner corner of her eye. There is a purulent discharge when pressure is applied to the area. This condition is most likely to be;
- a. Strabismus
 - b. Dacryocystitis
 - c. Blepharitis
 - d. Chalazion
14. A 75-year-old woman presents with a gradual loss of central vision, making it difficult for her to read and recognize faces. Peripheral vision remains intact. She could be suffering from;
- a. Glaucoma
 - b. Cataract
 - c. Age-related macular degeneration
 - d. Retinal detachment
15. A patient presents with gradual hearing loss in both ears. The diagnostic procedure that would accurately assess the degree of hearing loss will be;
- a. Tympanometry

- b. Audiometry
 - c. Tonometry
 - d. Otoscopy
16. A 55-year-old male presents with a nosebleed that has persisted for over 30 minutes. The nurse should instruct the patient to;
- a. Tilt the head back
 - b. Pinch the nostrils and lean forward
 - c. Pack the nose with gauze
 - d. Apply heat to the nose
17. The definitive treatment for a deviated nasal septum is;
- a. Turbinotomy
 - b. Mucoplasty
 - c. Septoplasty
 - d. Nasal irrigation
18. The first line treatment for nasal polyps is;
- a. Oral antibiotics
 - b. Intranasal corticosteroids
 - c. Nasal decongestants
 - d. Polypectomy
19. A nurse is conducting an educational session on promoting dental health in the dental clinic. Information on the prevention of dental caries will include;
- a. Brushing teeth once a day
 - b. Using mouthwash only
 - c. Chewing sugar-free gum
 - d. Drinking fluoridated water
20. A patient has just undergone a dental extraction for a severely decayed tooth. The nurse is providing discharge instructions. Information to prevent complications will include;
- a. Brushing the extraction site vigorously
 - b. Rinsing the mouth with warm saline water frequently
 - c. Avoiding smoking or using a straw for 24-48 hours
 - d. Chewing on the extraction site to promote healing

SECTION B: SHORT ANSWER QUESTIONS (30 MARKS)

1. State four non-surgical management for a patient suffering from osteoarthritis of the knees (4 Marks)
2. State six characteristic features of rheumatoid arthritis (6 Marks)
3. State four clinical manifestations for acute rhinitis (4 Marks)
4. Outline six post-operative instructions for a patient following a vitrectomy (6 Marks)
5. State six nursing interventions for a patient suffering from chronic suppurative otitis media (6 Marks)
6. Outline four predisposing factors to the development of dental caries (4 Marks)

SECTION C: LONG ANSWER QUESTION (20 MARKS)

1. Mrs K, is admitted in the orthopaedic ward suffering from compartment syndrome.

- a. State four signs and symptoms that Mrs K might have presented with (4 Marks)
- b. State four aetiological factors of compartment syndrome (4 Marks)
- c. Describe the pathophysiology of compartment syndrome (12 Marks)

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