



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF MEDICAL SCIENCES  
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES  
KENYA REGISTERED COMMUNITY HEALTH NURSING  
SUPPLEMENTARY AND SPECIAL EXAMINATIONS**

**DNS 122: MEDICAL SURGICAL NURSING I**

**DATE: 15<sup>TH</sup> DECEMBER 2023**

Duration: 2 HOURS

Start: 11:15 AM

Finish: 1:15 PM

**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. Scurvy results from a deficiency of: -
  - A. vitamin A
  - B. Vitamin C
  - C. Vitamin E
  - D. Vitamin K
  
2. The primary cause of osteomalacia in adults is: -
  - A. Vitamin D deficiency
  - B. Vitamin K deficiency
  - C. Calcium Deficiency
  - D. Phosphate deficiency
  
3. The first event in inflammation is: -
  - A. arteriolar vasodilatation
  - B. Increased permeability
  - C. arteriolar vasoconstriction
  - D. Diapedesis
  
4. The following laboratory results below indicates compensated metabolic alkalosis: -
  - A. Low p CO<sub>2</sub>, normal bicarbonate and, high pH
  - B. Low p CO<sub>2</sub>, low bicarbonate, low pH
  - C. High p CO<sub>2</sub>, normal bicarbonate and, low p H
  - D. High pCO<sub>2</sub>, high bicarbonate and High pH
  
5. The following diagnostics tests is intended for latent **tuberculosis** infection
  - A. Sputum test
  - B. Tuberculin test
  - C. Gene mapping
  - D. Chest X-ray

6. The following is not a characteristic of Asthma
- A. Increase in IgG immunoglobulin
  - B. Airway hyper-responsiveness
  - C. infiltration of eosinophils in the airway
  - D. Increase mucus production
7. Emphysema is a chronic disorder which leads to:
- A. loss of elasticity of the wall of bronchioles and alveoli
  - B. surface area of exchange of gases is increased
  - C. alveolar sacs become empty even after expiration
  - D. Exhalation becomes easier during inflation of lungs
8. A flail chest refers to: -
- A. fracture of two or more ribs
  - B. fracture of the sternum
  - C. fracture of one rib in two or more places
  - D. fracture of two or more ribs in one place
9. Hematocrit of 60% is likely to be an indicator of: -
- A. Leukemia
  - B. Idiopathic Thrombocytopenia.
  - C. Non-Hodgkin Lymphoma
  - D. Polycythemia vera
10. A patient with Forced Expiratory Volume ( $FEV_1$ ) of 60% is likely to be suffering from: -
- A. Pleural effusion.
  - B. Trauma.
  - C. Emphysema.
  - D. Asthma.

11. Vitamin B12 anemia is characterized by: -
- A. Microcytosis of RBC
  - B. Normal hematocrit
  - C. Hypochromic RBC
  - D. Macrocytosis of RBC
12. One following oxygen delivery system has constant  $FiO_2$ : -
- A. Nasal Prongs
  - B. Venturi Mask
  - C. Non-rebreather mask
  - D. Partial rebreather mask
13. Patient manifesting with “*hot potato voice*” is likely to be suffering from: -
- A. Vincent angina
  - B. Periodontitis
  - C. Asthma
  - D. Ludwig Angina
14. The nursing action needed for claustrophobic patient before MRI is: -
- A. Explain the procedure to the patient.
  - B. Assume patient’s concerns
  - C. Give paralytic drugs to the patient.
  - D. Tell the patient to man up.
15. The best imaging study for patient with basilar artery aneurysm is: -
- A. Magnetic resonance imaging
  - B. X-Ray
  - C. Coronary angiography
  - D. Radioisotope imaging

16. Mild intermittent asthma is best managed by: -
- A. Long acting beta adrenergic agonist (LABA)
  - B. Short acting beta adrenergic agonist (SABA)
  - C. Long acting muscarinic antagonist (LAMA)
  - D. Inhaled corticosteroids (ICS)
17. X-ray film of a patient shows expanded airways. This likely to be indicative of: -
- A. Emphysema
  - B. Bronchiectasis
  - C. Tension pneumothorax
  - D. Diffused pneumonia
18. Hemoptysis is defined as: -
- A. Blood in sputum cough.
  - B. Blood in GIT
  - C. Bad breath
  - D. Dry cough
19. Traumatic injury of the following section of spine causes acute respiratory failure: -
- A. L1-L2
  - B. L3-L4
  - C. C5-C6
  - D. C7-C8
20. One of the following findings is of least priority to a nurse: -
- A. K<sup>+</sup> levels of 6.3 mEq/L
  - B. Blood glucose of 12.3 mmol/L in diabetic patient
  - C. SPO<sub>2</sub> level of 88 in COPD patient
  - D. Patient with blood pressure of 90/60 after surgery

**SECTION II: SHORT ANSWER QUESTIONS****(30 MARKS)**

1. State the five (5) H's of Pheochromocytoma (5 Marks)
2. State six (5) Nursing assessment for a patient with hypovolemia (5 Marks)
3. Discuss the three (3) stages of shock (6 Marks)
4. Discuss the four (4) physiologic Stages of Acute Inflammation (6 Marks)
5. Outline four (4) priority intervention for a patient presenting with myocardial infarction. (4 Marks)
6. Outline the pathophysiology of Asthma (4 Marks)

**SECTION III: LONG ANSWER QUESTIONS****(20 MARKS)**

1. A client has been admitted to the cardiac unit with exacerbation of heart failure symptoms. The nurse has given him a nursing diagnosis of decreased cardiac output related to heart failure, as evidenced by a poor ejection fraction, weakness, edema, and decreased urinary output.
  - a. State four (4) risk factors for Heart Failure (4 Marks)
  - b. State any four (4) diagnostic tests for heart failure (4 Marks)
  - c. Using the nursing process, write a care plan with four priority nursing diagnosis (12 Marks)