

# AMREF INTERNATIONAL UNIVERSITY SCHOOL OF MEDICAL SCIENCES DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES KENYA REGISTERED COMMUNITY HEALTH NURSING END OF SEMESTER EXAMINATIONS

## DNS 122: MEDICAL SURGICAL NURSING I

DATE: 17<sup>TH</sup> APRIL 2024

TIME:2 Hours

START: 0900 HOURS

FINISH: 1100 HOURS

## **INSTRUCTIONS**

- 1. This exam will be marked out of 70 Marks
- **2.** ALL Questions are compulsory.
- **3.** The Examination has Three Sections: Section I- Multiple Choice Questions, Section II: Short Answer Questions, Section III: Long Essay Questions
- 4. Answer all Questions in the ANSWER BOOKLET provided
- **5.** Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

# SECTION A: MULTIPLE CHOICE QUESTIONS (30 MARKS)

- 1. The appropriate position for a client undergoing paracentesis is:
  - a. Prone.
  - b. Supine
  - c. Side-lying, with legs pulled up and head bent down onto the chest
  - d. Side-lying, with a pillow under the hip, and head straightened
- 2. To prevent post procedural complications associated with lumbar puncture:
  - a. Observe strict asepsis, ensure patient remains flat 6-8 hours after the procedure
  - b. Limit fluid intake, nurse in a bright airy room
  - c. Maintain strict asepsis , position client in semi fowlers position
  - d. Encourage ambulation within 2 hours, Limit fluid intake
- 3. The type biopsy recommended for taking a bone marrow sample is the:
  - **a.** Aspiration biopsy
  - b. Punch biopsy
  - **c.** Excisional biopsy
  - d. Brush biopsy
- 4. Pharmacologic agents that control pain by interfering with depolarization of the nerve include:
  - a. Non steroidal Anti Inflammatory Drugs (NSAIDS)
  - b. Corticosteriods
  - c. Anticonvulsants
  - d. Opioid analgesics
- 5. The following constitutes the body's first line of defense:
  - a. Tears
  - b. T lymphocytes
  - **c.** The complement system
  - d. Neutrophils

- 6. In wound healing:
  - **a**. Healing by primary intention occurs when wound margins cannot be approximated
  - b. Chemotherapy can delay wound healing
  - c. Healing by secondary intention occurs with minimal scarring
  - d. Clean surgical wounds heal by tertiary intention
- 7. In the nursing care of a client with fluid volume excess:
  - a. Weight gain is the best indicator of fluid retention
  - b. Edema is objectively estimated by a visual assessment
  - c. The risk of impaired skin integrity is minimal
  - d. Interventions to support respiratory status are not a priority
- 8. Insensible fluid losses include:
  - a. Urine
  - b. Gastric drainage
  - c. Bleeding
  - d. Perspiration
- **9.** Nursing interventions to manage pain in a client who cannot communicate verbally includes:
  - a. Assess the nonverbal cues of pain to establish severity.
  - b. Obtain baseline behavioral indicators from family members.
  - c. Review medical records for the time ,dose and response to the last dose of treatment
  - d. Administer a bolus dose of opioid analgesics immediately
- **10.** Using the parklands formula and 3mls/kg bwt, calculate the amount of fluid to be replaced within the first 8 hours to an 80kg patient who sustains burns to the entire right arm and chest :
  - **a.** 4320
  - **b.** 2160
  - **c.** 1080
  - **d.** 8640

- 11. Hemophilia is characterized by a deficiency of :
  - a. Iron
  - b. White blood cells
  - c. Factor VIII
  - **d.** Vitamin K
- **12.**Nursing care for patient with a platelet count of 25,000 per microliter of blood should include:
  - a. Close monitoring for Fever, signs of infection
  - b. Transfusion with packed red blood cells
  - c. Monitoring for bleeding episodes
  - d. Reverse barrier nursing
- 13. Iron deficiency anaemia
  - **a.** Is characterized by microcytic erythrocytes
  - b. Is characterized by megaloblastic erythrocytes
  - **c.** In children is caused by tapeworm infestation
  - d. The gold standard of treatment is transfusion with whole blood.
- 14. Muscle wasting in a patient with Cushing's syndrome can be reduced by administering;
  - a. High calorie diet
  - b. High protein diet
  - **c.** Vitamin D
  - d. Low sodium diet
- 15. Nursing interventions for a patient with hyperparathyroidism include:
  - a. Fluid restriction
  - b. Increase intake of calcium rich food
  - **c.** Encourage ambulation
  - d. Nursing the patient in a dim lighted room
- **16**. Pituitary gland disorder that results in reduced production of Adrenocorticotropic hormone (ACTH) may lead to:
  - **a**. Diabetes insipidus
  - **b.** Cushing's syndrome
  - c. Addison's disease
  - d. Hypogonadism

17. A patient with Addison's disease is likely to present with:-

- a. Hypertension
- b. Hyperpigmentation
- **c.** Hyperglycemia
- d. Hypernatremia
- 18. A pituitary tumour secreting excess vasopressin is likely to cause:
  - a. Diabetes inspidus
  - b. Cretinism
  - c. Syndrome of inappropriate antidiuretic hormone secretion
  - d. Gigantism
- 19. Interventions for a patient with Hypothyroidism include:
  - **a.** Nursing the patient in a cool room
  - b. Preparing the patient for thyroidectomy
  - c. Administration of laxatives
  - d. Administering sedatives
- 20. The nutritional interventions for a patient with hyperthyroidism include:
  - a. Provide privacy during meal times
  - b. Encourage the patient to reduce the amount of food they eat
  - **c.** Minimise fluid intake as much as possible
  - d. A high fat diet is encouraged

#### 21. Pheochromocytomas mainly secrete:-

- a. Cortisol
- b. Adrenaline
- **c.** Aldosterone
- d. Androgens

#### 22. Heart failure is:-

- a. Inability of the heart to fit in the mediastinum
- b. Limited blood flow to the heart due to severe congestion
- **c.** Inability of the heart to pump blood that meets body tissue needs
- d. Dextraposition of the heart alongside myocardial hypertrophy

- **23.** To prevent Coronary Heart Disease (CHD), the following diet should be encouraged:
  - a. Plant proteins and animal fats
  - b. Soluble fiber and omega 3 fatty acids
  - c. Seasoned foods and sea foods
  - d. Triglycerides and plant proteins
- 24. The following is a danger sign for a patient with chest injury;
  - a. Systolic BP of < 120mmhg
  - b. Heart Rate of > 100 Beats / min
  - **c.** PaCo2 > 5kpa on room air
  - d. Reducing size of a pneumothorax
- 25. The following is a common predisposing factor to aneurysms:
  - a. Male gender
  - b. Hypertension
  - c. Repeated typhoid infections
  - d. Diet rich in nitrosamines
- 26. A tension pneumothorax is,
  - a. A complication of a simple pneumothorax
  - b. The commonest cause of myocardial infarction
  - c. Preferably diagnosed clinically
  - d. Preferably diagnosed through a chest xray
- 27. The most common predisposing factor for Asthma is:
  - a. Genetics
  - b. Age
  - **c.** Cold temperatures
  - d. Dust
- 28. The following breath sound is a cardinal sign of an acute asthmatic attack:
  - a. Crackle
  - b. Stridor
  - c. Rale
  - d. Wheeze

29. The most common microorganism that causes high incidence of Pneumonia is:-

- a. Staphylococcus aureus
- b. Streptococcus Pneumoniae
- **c.** Covid 19
- d. Pneumocystis carinii pneumonia

30. The following condition mainly manifests with a barrel chest:-

- a. Emphysema
- b. Pumonary tuberculosis
- **c.** Bronchial asthma
- d. Pharyngitis

## SECTION II: SHORT ANSWER QUESTIONS (20 MARKS)

- 1. Outline five (5) factors that interfere with wound healing (5 Marks)
- 2. State four (4) non pharmacological measures that can be instituted to control pain (4 Marks)
- 3. Describe the nursing management of a patient with an Acute Vaso occlusive crisis in sickle cell disease (5 Marks)
- 4. Giving examples, describe any three (3) classifications of shock (6 Marks)

# SECTION III : LONG ANSWER QUESTION (20 MARKS)

- 1. Mr. Q, 50 yrs old is admitted with left sided heart failure.
  - a. Draw and label a diagram illustrating electrical conductivity of the heart (4 Marks)
  - b. Describe the pathophysiology of heart failure (4 Marks)
  - c. Describe the management of Mr Q from admission till discharge (12 Marks)