



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES
KENYA REGISTERED COMMUNITY HEALTH NURSING
End of March-August Semester Examinations
Supplementary /Special Examinations

DNS 122: Medical Surgical Nursing I

TIME: 2 HOURS

Start: 0900 HOURS

Finish: 1100 HOURS

Date: Tuesday 5th August 2025

INSTRUCTIONS

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

SECTION I: MULTIPLE CHOICE QUESTIONS (50 MARKS)

1. One of the following is a common complication of lumbar puncture procedure:-
 - A. Spinal leak
 - B. Dizziness
 - C. Headache
 - D. Infection

2. The best position for a client having a lumbar puncture performed is;
 - a) Side-lying, with a pillow under the hip
 - b) Prone, with a pillow under the abdomen to support the patient
 - c) Prone, in slight-Trendelenburg's position
 - d) Side-lying, with legs pulled up and head bent down onto chest

3. To facilitate better view of the alimentary canal during endoscopy procedure;
 - A. patient should fast for 8 hours before the procedure
 - B. patient should eat a regular supper and breakfast
 - C. Air is inflated through the endoscope during the procedure
 - D. patient is encouraged to swallow when the endoscope is being advance

4. To prevent spinal leak following lumbar puncture procedure the nurse should:
 - A. Apply adhesive tape
 - B. Encourage a lot of fluids
 - C. Encourage patient to lie flat in supine position for at least 2-3 hours
 - D. Encourage patient to maintain fowlers position for at least 2-3 hours

5. Which of the following is an absolute contraindication for Computed Tomography (CT) with contrast:
 - A. Renal injury
 - B. Trauma
 - C. Suspected internal organ disease
 - D. Liver disease.

6. The following is the MOST effective method to monitor fluid volume status: -
 - A. Vital sign monitoring
 - B. Daily weighing
 - C. Input-output monitoring
 - D. Clinical signs

AMMU

7. A positive balance in a fluid input-output chart is indicative of: -
- A. The input being less than the output
 - B. The output being less than the input
 - C. The input being equal to the output
 - D. Input being present with no output
8. Pain arising from internal organs such as the bladder or intestine is referred to as:
- A. Somatic pain
 - B. Visceral pain
 - C. Chronic pain
 - D. Acute pain
9. The stage of shock where compensatory mechanisms are activated and perfusion of vital organs is still maintained is: -
- A. Established stage
 - B. Non-progressive stage
 - C. Progressive stage
 - D. Irreversible stage
10. Wound healing follows a sequential process of: -
- A. Inflammation, Proliferative, Remodeling, Hemostasis
 - B. Proliferative, Remodeling, Inflammation, Hemostasis
 - C. Hemostasis, Inflammation, Proliferative, Remodeling
 - D. Proliferative, Inflammation, Hemostasis, Remodeling,

11. Digoxin:-

- A. Increases the heart rate and reduces contractile force of the heart
- B. Reduces the heart rate and increases contractile force of the heart
- C. Reduces hyperkalemia and increases hypercalcemia
- D. Increases cardiac output and reduces the afterload

12. In emergency cardiac care, primary survey helps to:-

- A. Identify and manage conditions likely to cause death in a short span
- B. Take detailed history of a patient, family and work place
- C. Provide long term treatment for patients with trauma
- D. Identify and commence treatment for medical and surgical conditions

13. The following are the most critical agents in management of Myocardial Infarction:-

- A. Morphine, Nitroglycerene, Oxygen and Asprin
- B. Pethidine, Diclofenac, Oxygen and Buscopan
- C. Buscopan, Naloxone, Diazepam and Asprin
- D. Heparin, Indocid, Warfarin and Oxygen

14. A chest tube should be inserted within the:-

- A. Femoral Triangle
- B. Triangle of safety
- C. Subscapular region
- D. Xiphoid and manubrium junction

15. When a patient is on Under Water Seal Drainage (UWSD):-

- A. Ordinary water can be used to create the underwater seal
- B. The bottle should be placed above the patients' chest
- C. Changing of the UWSD system should be done aseptically
- D. The chest tube should be clamped every 6hours

16. The diagnostic tests for Deep Venous Thrombosis (DVT) include:-

- A. D-dimers, Doppler ultrasound and a venogram
- B. Coagulation tests,ESR,C-RP test
- C. D-dimers,arteriogram,serum cardiac enzymes
- D. A venogram, Homan's sign and sclerotherapy

17. The following is a clinical presentation in patient with hemophila A:-

- A. Subcutaneous emphysema.
- B. Petechiae.

- C. Intermittent claudication.
- D. Epistaxis.

18. The following findings would be characteristic of a patient who experiences hemolytic reaction during blood transfusion:-

- A. Urticaria, itching, respiratory distress.
- B. Wet breath sounds, severe shortness of breath.
- C. Chills and fever occurring about an hour after the infusion started.
- D. Hypotension, backache, low back pain, fever.

AMU

19. The problem taking least priority when managing a client with a vaso occlusive crisis in sickle cell disease is:-

- A. Signs of dehydration
- B. Lack of perfusion to peripheral tissues
- C. Generalized pain
- D. Ineffective management of therapeutic regimen

20. In the full hemogram, the parameter that indicates relative size of erythrocytes is:-

- A. Mean corpuscular hemoglobin (MCH)
- B. Mean corpuscular volume (MCV)
- C. Mean corpuscular hemoglobin concentration (MCHC)
- D. Red cell distribution width (RDW)

21. Acute lymphocytic leukemia is characterized by existence of a large number of immature:

- A. Leukocytes
- B. Lymphocytes
- C. Reticulocytes
- D. Thrombocytes

22. Ten minutes into a blood transfusion, a patient reports itching, chills, a headache and a temperature of 37.8°C, up from 37.2°C. The appropriate nursing action after stopping the transfusion will be:-
- A. Notify the physician.
 - B. Disconnect the blood tubing from the **Intravenous (IV)** site ,replace it with a new IV tubing set-up and keep the vein open with normal saline 0.9%.
 - C. Collect urine sample.
 - D. Send the blood tubing and bag to the blood bank.
23. A patient who has Syndrome of Inappropriate Anti Diuretic Hormone (SIADH) following head injury will present with:-
- A. Dehydration
 - B. weight gain
 - C. urine specific gravity of 1.004
 - D. serum sodium of 140MEq/L
24. The best treatment for hyperprolactinemia is:
- a. Estrogen replacement therapy
 - b. Levonorgestrel
 - c. Bromocriptine
 - d. Combined Oral Contraceptive pills
25. Hormones produced by the anterior pituitary gland include:-
- A. Antidiuretic hormone, growth hormone , follicle stimulating hormone,
 - B. Growth hormone ,oxytocin , follicle stimulating hormone
 - C. Thyroxine, adrenocorticotrophic hormone, follicle stimulating hormone
 - D. Thyroid stimulating hormone, follicle stimulating hormone, growth hormone
26. The following finding is expected when assessing a client , newly diagnosed with diabetes insipidus: -
- A. Polyuria.
 - B. Weight gain.
 - C. Hyperglycemia.
 - D. Profuse sweating and flushed skin
27. Excessive production of adrenocorticotrophic hormone from the pituitary glands results in:-
- A. Cushing's' disease
 - B. Addison's disease
 - C. Acromegaly
 - D. Dwarfism

28. The following are characteristic features in acromegaly:-
- A. Marked linear growth and enlarged teeth
 - B. Widely spaced teeth and small chin
 - C. Marked linear growth and non-proportional stature
 - D. Non-proportional stature and coarse facial features
29. After partial thyroidectomy, a patient presenting with a tingling sensation, numbness of face, lips, hands and twitching of facial muscles is likely to be experiencing:-
- A. Thyroid storm/crisis
 - B. Hypocalcemic Tetany
 - C. Addisonian crisis
 - D. Hypercalcemic convulsions
30. Exophthalmos is a feature common in:-
- A. Toxic nodular goiter
 - B. Autoimmune thyroiditis
 - C. Hashimoto's disease
 - D. Grave's disease
31. The appropriate technique to use in the physical assessment of the thyroid gland is:-
- A. Ask the patient to hyperextend the neck during palpation.
 - B. Percuss the neck for dullness to define the size of the thyroid.
 - C. Have the patient swallow during inspection and palpation of the gland.
 - D. Use deep palpation to determine the extent of a visibly enlarged thyroid gland.
32. The following serum measurement is NOT used to diagnose diabetes mellitus:-
- A. Fasting blood glucose
 - B. Postprandial blood glucose
 - C. Glycated Hemoglobin HbA1c
 - D. Serum Insulin levels
33. The following is NOT a features of Type 2 diabetes mellitus: -
- A. Impaired insulin secretion
 - B. Increased Insulin resistance
 - C. Excessive hepatic glucose production
 - D. Diabetic ketoacidosis
34. 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 no scarring
- D. Clean surgical wounds heal by tertiary intention

35. 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

36. The following factor constitutes the body's second line of defense:-

- A. Intact skin
- B. Inflammation
- C. T Lymphocytes
- D. Immunoglobulins

37. The immunoglobulin responsible for providing immunity on mucosal surfaces is:-

- A. IgA
- B. IgG
- C. IgD
- D. IgM

38. Insensible fluid losses include:

- A. Urine
- B. Gastric drainage
- C. Bleeding
- D. Perspiration

39. 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

40. 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.

41. The priority nursing diagnostic label for a patient with Acute Myelocytic Leukaemia with neutropenia is-

- A. Risk of infection
- B. Fluid volume deficit
- C. Body image disturbance
- D. Imbalanced nutrition, less than body requirement

42. End stage renal disease is characterized by anaemia primarily due to:-

- A. Erythropoietin deficiency
- B. Bone marrow dysfunction
- C. Fluid volume excess
- D. Hemodialysis related losses

43. Diverticulosis is most often associated with;

- a. A low fiber diet
- b. Inadequate exercise
- c. Intestinal surgery
- d. A high fiber diet

44. Nutritionally, surgery:-

- a. Reduces nutritional requirements
- b. Decreases one's calorie requirement
- c. Contributes to the development of PEM
- d. Increases one's fat requirements

45. Insoluble dietary fiber;
- Can increase blood glucose
 - Can decrease blood cholesterol
 - Commonly causes diverticular disease
 - Is preferably provided by commercially prepared fiber products
46. Situations that may lead to fluid and electrolyte imbalance are:-
- Vomiting and burns
 - Diarrhea and cuts
 - Broken bones and high fever
 - Sweating and excessive fat intake
47. In the stomach, hydrochloric acid;
- Denatures proteins and activates pepsin
 - Hydrolyses proteins and denatures pepsin
 - Emulsifies proteins and releases peptidase
 - Condenses proteins and facilitates digestion
48. If an essential amino acid that is needed to make a protein is unavailable, the cells must:-
- Deaminate another amino acid
 - Substitute a similar amino acid
 - Break down proteins to obtain it
 - Synthesize the amino acid from glucose and nitrogen
49. The primary function of fats in the body is to:-
- Facilitate protein metabolism
 - Promote absorption of fat soluble vitamins
 - Provide energy
 - Synthesize DNA and RNA

50. The following drug causes severe respiratory distress:-

- A. Morphine
- B. Pethidine
- C. Fentanyl
- D. Tramadol

SECTION II: LONG ANSWER QUESTION (20 MARKS)

1. Diabetic Ketoacidosis (DKA) is a serious, acute, and potentially life-threatening complication of diabetes mellitus
 - A) Define diabetic ketoacidosis (DKA). (1 Mark)
 - B) Describe the pathophysiology diabetic ketoacidosis (DKA). (5 Marks)
 - C) State four (4) clinical manifestations of diabetic ketoacidosis (DKA). (4 Marks)
 - D) Outline the nursing management of a patient with diabetic ketoacidosis including assessment, interventions, and monitoring. (DKA) (10 Marks.)

AMMU