

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FOURTH YEAR EXAMINATION FOR BACHELOR OF SCIENCE IN NURSING

NURS 449: MEDICAL SURGICAL SPECIALITIES 9 (NEPHROLOGY AND CRITICAL CARE NURSING)

STREAMS: Y4S2

TIME: 2 HOURS

DAY/DATE :

INSTRUCTIONS:

1. Do not write anything on the question paper.
 2. Mobile phones and any other reference materials are NOT allowed in the examination room.
 3. The paper has three sections. Answer ALL questions in Sections I, II and III.
 4. All your answers for Section I (MCQs) should be on one page.
 5. Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.
 6. Write your answers legibly and use your time wisely
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Section A: Multiple Choice Questions (20 Marks)

1. When inspecting a cardiovascular client, the nurse notes that he needs to sit upright to breathe. This behavior is most indicative of:
 - a) Pericarditis
 - b) Anxiety
 - c) Congestive heart failure
 - d) Angina

2. Nursing interventions designed to decrease the risk of infection in a client with an indwelling catheter include:
 - a) Cleanse area around the meatus twice a day
 - b) Empty the catheter drainage bag at least daily
 - c) Change the catheter tubing and bag every 48 hours
 - d) Maintain fluid intake of 1200-1500 mL every day

3. To appropriately monitor therapy and client progress, the nurse should be aware that increased myocardial work and O₂ demand will occur with which of the following?
 - a) Positive inotropic therapy
 - b) Negative chronotropic therapy
 - c) Increase in balance of myocardial O₂ supply and demand
 - d) Afterload reduction therapy

4. A nasogastric (NG) tube inserted preoperatively is attached to low, intermittent suction. A client with an NG tube exhibits these symptoms: He is restless; serum electrolytes are sodium is 138, potassium is 4.0, blood pH 7.53. This client is most likely experiencing:
 - a) Hyperkalemia
 - b) Hyponatremia
 - c) Metabolic acidosis
 - d) Metabolic alkalosis

5. Which of the following serum laboratory values would the nurse monitor during gentamicin therapy?
 - a) Creatinine
 - b) Sodium
 - c) Calcium
 - d) Potassium

6. A 55-year-old client is unconscious, and his physician has decided to begin tube feeding him using a smallbore silicone feeding tube. After the tube is inserted, the nurse identifies the most reliable way to confirm appropriate placement is to:
 - a) Aspirate gastric contents
 - b) Auscultate air insufflated through the tube
 - c) Obtain a chest x-ray
 - d) Place the tip of the tube under water and observe for air bubbles

7. The nurse writes the following nursing diagnosis for a client in acute renal failure-- Impaired gas exchange related to:
 - a) Decreased red blood cell production
 - b) Increased levels of vitamin D
 - c) Increased red blood cell production
 - d) Decreased production of renin

8. A female client decides on hemodialysis. She has an internal vascular access device placed. To ensure patency of the device, the nurse must:
 - a) Assess the site for leakage of blood or fluids
 - b) Auscultate the site for a bruit
 - c) Assess the site for bruising or hematoma
 - d) Inspect the site for color, warmth, and sensation

9. A 1000-mL dose of lactated Ringer's solution is to be infused in 8 hours. The drop factor for the tubing is 10 gtt/mL. How many drops per minute should the nurse administer?
- a) 125 gtt/min
 - b) 48 gtt/min
 - c) 20 gtt/min
 - d) 21 gtt/min
10. A 47-year-old client comes to the emergency department complaining of moderate flank, abdominal, and testicular pain with nausea of 4 hours' duration. After physical examination and obtaining the client's history, the physician suspects urethral obstruction by calculi. The nurse realizes that the physician will order which one of the following diagnostic studies to best confirm the diagnosis?
- a) Cystoscopy
 - b) Kidneys, ureter, bladder, x-ray of abdomen
 - c) Intravenous pyelogram with excretory urogram
 - d) Ureterolithotomy
11. A client takes warfarin (Coumadin) 15 mg po daily. To evaluate the medication's effectiveness, the nurse should monitor the:
- a) Prothrombin time (PT)
 - b) Partial thromboplastin time (PTT)
 - c) PTT-C
 - d) Fibrin split products
12. A female client has been diagnosed with chronic renal failure. She is a candidate for either peritoneal dialysis or hemodialysis and must make a choice between the two. Which information should the nurse give her to help her decide?
- a) Hemodialysis involves less time to filter the blood; but the client must consider travel time, distance, and inconvenience.
 - b) Hemodialysis involves more time to filter the blood than does peritoneal dialysis.
 - c) Peritoneal dialysis has almost no complications and is less time consuming than hemodialysis. Therefore it is preferred.
 - d) Peritoneal dialysis requires that a home health nurse prepare and administer the treatments.
13. A 55-year-old client is admitted with a diagnosis of renal calculi. He presented with severe right flank pain, nausea, and vomiting. The most important nursing action for him at this time is:
- a) Intake and output measurement
 - b) Daily weights
 - c) Straining of all urine
 - d) Administration of O2 therapy

14. A 32-year-old client who is being seen in the clinic for a possible asthma attack stops wheezing suddenly as the nurse is doing a lung assessment. Which one of the following nursing interventions is most important?
- Place the client in a supine position.
 - Draw a blood sample for arterial blood gases.
 - Start O₂ at 4 L/min.
 - Establish a patent airway.
15. A client has renal failure. Today's lab values indicate he has elevated serum potassium. What additional priority information does the nurse need to obtain?
- Evaluation of his level of consciousness
 - Evaluation of an electrocardiogram
 - Measurement of his urine output for the past 8 hours
 - Serum potassium lab values for the last several days
16. A client is receiving peritoneal dialysis. He has been taught to warm the dialyzing fluid prior to instilling it because:
- Warmed solution helps keep the body temperature maintained within a normal range during instillation
 - Warmed solution helps dilate the peritoneal blood vessels
 - Warmed solution decreases the risk of peritoneal infection
 - Warmed solution promotes a relaxed abdominal muscle
17. A female client is exhibiting signs of respiratory distress. Which of the following signs indicate a possible pneumothorax?
- Crackles or rales on the affected side
 - Bradypnea and bradycardia
 - Shortness of breath and sharp pain on the affected side
 - Increased breath sounds on the affected side
18. A client undergoes a transurethral resection, prostate (TURP). He returns from surgery with a three-way continuous Foley irrigation of normal saline in progress. The purpose of this bladder irrigation is to prevent:
- Bladder spasms
 - Clot formation
 - Scrotal edema
 - Prostatic infection
19. A 52-year-old female client is admitted to the hospital in acute renal failure. She has been on hemodialysis for the past 2 years. Stat arterial blood gases are drawn on the client yielding the following results: pH 7.30, PCO₂ 51 mm Hg, HCO₃⁻, 18 mEq/L, PaO₂, 84 mmHg. The nurse would interpret these results as:
- Compensated metabolic alkalosis
 - Respiratory acidosis
 - Partially compensated metabolic alkalosis
 - Combined respiratory and metabolic acidosis

20. A 68-year-old man was recently diagnosed with end-stage renal disease. He has not yet begun dialysis but is experiencing severe anemia with associated symptoms of dyspnea on exertion and chest pain. Which statement best describes the management of anemia in renal failure?
- Hematocrit levels usually remain slightly below normal in clients with renal failure.
 - Transfusion is often begun as early as possible to prevent complications of anemia such as dyspnea and angina.
 - Anemia in renal failure is frequently caused by low serum iron and ferritin and corrected by oral iron and ferritin replacement therapy.
 - The renal secretion of erythropoiesis is decreased. The bone marrow requires erythropoietin to mature red blood cells.

Section B: Short Answer Questions (30 Marks)

1. Explain any two (2) clinical methods used to monitor blood circulation in a critically ill patients (6 marks)
2. Describe the emergency nursing management of the client presenting with hypovolemic shock (5 marks)
3. Outline three (3) common causes and subsequent management of the client with pre-renal acute kidney injury (6 marks)
4. State any five (5) clinical characteristics that indicate the presence of a life-threatening condition in an adult patient (5 marks)
5. Explain the medical management of the patient with acute nephritic syndrome (5 marks)
6. State six (6) common manifestations of glomerular injury (3 marks)

Section C: Long Answer Questions (20 Marks)

1. A 46-year old man with chronic kidney disease is undergoing monthly routine evaluation in the renal clinic:
 - a) Define chronic kidney disease (2 marks)
 - b) Briefly outline six (6) possible elements of evaluation for this client (6 marks)
 - c) Describe the standard clinical interventions that would prevent and/or slow the rate of disease progression for this client (6 marks)
 - d) Explain the nursing instructions for this client (6 marks)

END
