PRACTICE QUESTIONS
(POST BASIC NURSING EXAM AIIMS 2018)

1. A patient who is comatose is admitted to the hospital with an unknown history. Respirations are deep and rapid. Arterial blood gas levels on admission are pH, 7.20; PaCO2, 21 mm Hg; PaO2, 92 mm Hg; and HCO3-, 8. You interpret these laboratory values to indicate:
   A. Metabolic acidosis
   B. Metabolic alkalosis
   C. Respiratory acidosis
   D. Respiratory alkalosis
2. A patient with a cardiac history is taking the diuretic furosemide (Lasix) and is seen in the emergency department for muscle weakness. Which laboratory value do you assess first?
   A. Serum albumin
   B. Serum sodium
   C. Hematocrit
   D. Serum potassium
3. Which of these patients do you expect will need teaching regarding dietary sodium restriction?
   A. An 88-year-old with a fractured femur scheduled for surgery
   B. A 65-year-old recently diagnosed with heart failure
   C. A 50-year-old recently diagnosed with asthma and diabetes
   D. A 20-year-old with vomiting and diarrhea from gastroenteritis
4. You teach patients to replace sweat, vomiting, or diarrhea fluid losses with which type of fluid?
   A. Tap water or bottled water
   B. Fluid that has sodium (salt) in it
   C. Fluid that has K+ and HCO3- in it
   D. Coffee or tea, whichever they prefer
5. You assess four patients. Which patient is at greatest risk for the development of hypocalcemia?
   A. 56-year-old with acute kidney renal failure
   B. 40-year-old with appendicitis
   C. 28-year-old who has acute pancreatitis
   D. 65-year-old with hypertension and asthma
6. Which of the following activities can you delegate to nursing assistive personnel (NAP)? (Select all that apply.)
   A. Measuring oral intake and urine output
   B. Preparing intravenous (IV) tubing for routine change
   C. Reporting an IV container that is low in fluid
   D. Changing an IV fluid container
7. Assessment findings consistent with intravenous (IV) fluid infiltration include: (Select all that apply.)
   A. Edema and pain
   B. Streak formation
   C. Pain and erythema
   D. Pallor and coolness
   E. Numbness and pain
8. Which of the following defining characteristics is consistent with fluid volume deficit?
   A. A 1-lb (0.5 kg) weight loss, pale yellow urine
   B. Engorged neck veins when upright, bradycardia
   C. Dry mucous membranes, thready pulse, tachycardia
   D. Bounding radial pulse, fl at neck veins when supine
9. Which of the following assessments do you perform routinely when an older adult patient is receiving intravenous 0.9% NaCl?
   A. Auscultate dependent portions of lungs
   B. Check color of urine
   C. Assess muscle strength
   D. Check skin turgor over sternum or shin
10. While receiving a blood transfusion, your patient develops chills, tachycardia, and flushing. What is your priority action?
    A. Notify a health care provider
    B. Insert an indwelling catheter
    C. Alert the blood bank
    D. Stop the transfusion
11. The health care provider's order is 1000 mL 0.9% NaCl with 20 mEq K+ intravenously over 8 hours. Which assessment finding causes you to clarify the order with the health care provider before hanging this fluid?
    A. Flat neck veins
    B. Tachycardia
    C. Hypotension
    D. Oliguria
12. Your patient who has diabetic ketoacidosis is breathing rapidly and deeply. Intravenous (IV) fluids and other treatments have just been started. What should you do about this patient's breathing?
    A. Notify her health care provider that she is hyperventilating
    B. Provide frequent oral care to keep her mucous membranes moist
    C. Ask her to breathe slower and help her to calm down and relax
    D. Assess her for pain and request an order for a sedative
13. Your patient had 200 mL of ice chips and 900 mL intravenous (IV) fluid during your shift. Which total intake should you record?
    A. 700 mL
    B. 900 mL
    C. 1000 mL
    D. 1100 mL
14. The health care provider's order is 1000 mL 0.9% NaCl IV over 6 hours. Which rate do you program into the infusion pump?
    A. 125 mL/hr
    B. 167 mL/hr
    C. 200 mL/hr
    D. 1000 mL/hr
15. Place the following steps for intravenous (IV) catheter insertion in the correct order:
    A. Perform hand hygiene
    B. Open and prepare infusion set
    C. Select appropriate vein and insert catheter
    D. Use two identifiers to ensure correct patient
    E. Assess for risk factors such as age or platelet count
    F. Carefully check the health care provider's order for the IV therapy
16. 3.5 - 5.0 mEq/L; Maintains resting membrane potential of skeletal, smooth, and cardiac muscle, allowing for normal muscle function:
    A. Potassium
    B. Ionized Calcium
    C. Magnesium
    D. Phosphate
17. 4.5 - 5.3 mg/dL; Influences excitability of nerve and muscle cells, necessary for muscle contraction:
    A. Potassium
    B. Ionized Calcium
    C. Magnesium
    D. Phosphate
18. 1.5 - 2.5 mEq/L; Influences function of neuromuscular junctions and is a cofactor for numerous enzymes:
    A. Potassium
    B. Ionized Calcium

C. Magnesium
D. Phosphate

19. 2.7 - 4.5 mg/dL; Necessary for production of ATP, the energy source for cellular metabolism:
A. Potassium
B. Ionized Calcium
C. Magnesium
D. Phosphate

20. Bilateral muscle weakness that begins in quadriceps and may ascend to respiratory muscles; abdominal distention; decreased bowel sounds; constipation; cardiac dysrhythmias; signs of digoxin toxicity at normal digoxin levels:
A. Hypokalemia
B. Hyperkalemia
C. Hypocalcemia
D. Hypercalcemia
E. Hypomagnesemia
F. Hypermagnesemia

21. Bilateral muscle weakness in quadriceps, transient abdominal cramps and diarrhea, cardiac dysrhythmias, cardiac arrest:
A. Hypokalemia
B. Hyperkalemia
C. Hypocalcemia
D. Hypercalcemia
E. Hypomagnesemia
F. Hypermagnesemia

22. Measures the hydrogen ion concentration in the body fluids (7.35 - 7.45).
A. pH
B. PaCO2
C. PaO2
D. Oxygen saturation
E. Base Excess
F. Bicarbonate

23. Is the partial pressure carbon dioxide in arterial blood (35-45).
A. pH
B. PaCO2
C. PaO2
D. Oxygen saturation
E. Base Excess
F. Bicarbonate

24. Is the partial pressure of oxygen in the blood (80 - 100).
A. pH
B. PaCO2
C. PaO2
D. Oxygen saturation
E. Base Excess
F. Bicarbonate

25. Is the point at which hemoglobin is saturated by oxygen (95% - 99%).
A. pH
B. PaCO2
C. PaO2
D. Oxygen saturation
E. Base Excess
F. Bicarbonate

26. Is the amount of blood buffer (hemoglobin and bicarbonate) that exists (+2).
A. pH
B. PaCO2
C. PaO2
D. Oxygen saturation
E. Base Excess
F. Bicarbonate

27. Is the major component in the bicarbonate buffer system, which buffers metabolic acids.
A. pH
B. PaCO2
C. PaO2
D. Oxygen saturation
E. Base Excess
F. Bicarbonate

28. Headache, lightheadedness, decreased level of consciousness (confusion, lethargy, coma), cardiac dysrhythmias. pH < 7.35, PaCO2 > 45 mm Hg (6.0 kPa), HCO3- level normal if uncompensated or >26 mEq/L (>26 mmol/L) if compensated.
A. Respiratory Acidosis
B. Respiratory Alkalosis
C. Metabolic Acidosis
D. Metabolic Alkalosis

29. Increased rate & depth of respirations (hyperventilation), lightheadedness, numbness & tingling of extremeties and circumoral region (parasthesias), excitement and confusion possibly followed by decreased level of consciousness, cardiac dysrhythmias. pH > 7.45, PaCO2 <35 mm Hg (< 4.7 kPa), HCO3- level normal if short lived or uncompensated or < 22 mEq/L (< 22 mmol/L) if compensated, K+ level may be decreased (< 3.5 mEq/L) Ionized Ca++ level may be decreased (< 4.5 mg/dL).
A. Respiratory Acidosis
B. Respiratory Alkalosis
C. Metabolic Acidosis
D. Metabolic Alkalosis

30. Decreased level of consciousness (lethargy, confusion, coma), abdominal pain, cardiac dysrhythmias, increased rate and depth of respirations (compensatory hyperventilation). pH <7.35, PaCO2 normal if uncompensated or < 35 mm Hg (4.7 kPa) if compensated HCO3 level < 22 mEq/L (< 22 mmol/L) Anion gap normal or high, depending on cause. K+ level may be elevated (> 5.0 mEq/L), depending on cause.
A. Respiratory Acidosis
B. Respiratory Alkalosis
C. Metabolic Acidosis
D. Metabolic Alkalosis

31. Lightheadedness, numbness and tingling of fingers, toes and circumoral region (paesthesias); possible excitement and confusion followed by decreased level of conscious, cardiac dysrhythmias (may be attributable to hypokalemia). pH >7.45, PaCO2 normal if uncompensated or > 45 mm Hg (> 6.0 kPa) if comensated HCO-3 >26 mEq/L (>26 mEq/L (>26 mmol/L), K+ level often decreased (< 3.5 mEq/L) Ionized Ca++ level may be decreased (< 4.5 mg/dL).
A. Respiratory Acidosis
B. Respiratory Alkalosis
C. Metabolic Acidosis
D. Metabolic Alkalosis

32. Patients who retain fluids and have fluid volume excess require what?
A. Restriction of fluids
B. Parenteral replacement of fluids & electrolytes
C. Total parenteral nutrition (TPN)
D. Intravenous (IV) therapy
E. Vascular access devices (VAD)

33. Includes TPN, crystalloids, and colloids.
A. Restriction of fluids
B. Parenteral replacement of fluids & electrolytes
C. Total parenteral nutrition (TPN)
D. Intravenous (IV) therapy
E. Vascular access devices (VAD)

34. Is a nutritionally adequate hypertonic solution consisting of glucose, nutrients, and electrolytes administered centrally or peripherally; it is formulated to meet a patient's needs.

A. Restriction of fluids
B. Parenteral replacement of fluids & electrolytes
C. Total parenteral nutrition (TPN)
D. Intravenous (IV) therapy
E. Vascular access devices (VAD)

35. Is used to correct or prevent fluid and electrolyte imbalances.
A. Restriction of fluids
B. Parenteral replacement of fluids & electrolytes
C. Total parenteral nutrition (TPN)
D. Intravenous (IV) therapy
E. Vascular access devices (VAD)

36. Are catheters, cannulas, or infusion ports designed for repeated access to the vascular system.
A. Restriction of fluids
B. Parenteral replacement of fluids & electrolytes
C. Total parenteral nutrition (TPN)
D. Intravenous (IV) therapy
E. Vascular access devices (VAD)

37. Dextrose 5% in water, 0.9% sodium chloride (normal saline), lactated Ringers solution.
A. Isotonic electrolyte solution
B. Hypotonic electrolyte solution
C. Hypertonic electrolyte solution

38. 0.45% sodium chloride (half normal saline), 0.33% sodium chloride (one-third normal saline).
A. Isotonic electrolyte solution
B. Hypotonic electrolyte solution
C. Hypertonic electrolyte solution

39. Dextrose 10% in water, 3% to 5% sodium chloride, dextrose 5% in 0.9% sodium chloride, dextrose 5% in 0.45% sodium chloride, dextrose 5% in lactated Ringer's solution.
A. Isotonic electrolyte solution
B. Hypotonic electrolyte solution
C. Hypertonic electrolyte solution

40. The universal blood donor is:
A. Type A
B. Type B
C. Type O
D. Type AB

41. The universal blood recipient is:
A. Type A
B. Type B
C. Type O
D. Type AB

42. Is an antigen-antibody reaction and can range from mild response to a severe anaphylactic shock, which can be life threatening:
A. ABO system
B. Transfusion reaction
C. Autotransfusion
D. Venipuncture

43. Is the collection and reinfusion of a patient's own blood:
A. ABO system
B. Transfusion reaction
C. Autotransfusion
D. Venipuncture

44. Is a technique in which a vein is punctured through the skin by a rigid stylet (butterfly), a stylet covered with a plastic cannula (ONC), or a needle attached to a syringe:
A. ABO system
B. Transfusion reaction
C. Autotransfusion
D. Venipuncture

45. The body fluids constituting the interstitial fluid and blood plasma are:
A. Hypotonic
B. Hypertonic
C. Intracellular
D. Extracellular

46. Mrs. Green's arterial blood gas results are as follows: pH 7.32; PaCO2 52 mm Hg; PaO2 78 mm Hg; HCO3- 24 mEq/L. Mrs. Green has:
A. Metabolic acidosis
B. Metabolic alkalosis
C. Respiratory acidosis
D. Respiratory alkolosis

47. Mr. Frank is an 82-year-old patient who has had a 3-day history of vomiting and diarrhea. Which symptom would you expect to find on a physical examination?
A. Tachycardia
B. Hypertension
C. Neck vein distention
D. Crackles in the lungs

48. Which of the following is most likely to result in respiratory alkolosis?
A. Steroid use
B. Fad dieting
C. Hyperventilation
D. Chronic alcoholism

49. Hyperkalemia may be the result of chronic diarrhea.
A. True
B. False

50. A nursing student learns the difference between Chvostek's and Trousseau's signs. A positive Chvostek's sign elicits which of the following?
A. Bilateral muscle weakness in the quadriceps
B. Bilateral muscle weakness of the respiratory muscles
C. Carpal spasm with hypoxia
D. Contraction of facial muscles when a facial nerve is tapped

51. Hypercalcemia and hypermagnesemia increase neuromuscular excitability.
A. True
B. False

52. A nursing student studies acid-base balance. Which two organs are responsible for acid excretion, which helps maintain acid-base balance?
A. Lungs and kidneys
B. Kidneys and liver
C. Bladder and bowel
D. Lungs and bladder

53. A nursing student studies the difference between metabolic acidosis and alkalosis. Which increases blood HCO-3?
A. Metabolic alkalosis
B. Metabolic acidosis

54. Which individual would least likely suffer from a disturbance in fluid volume, electrolyte, or acid-base balance?
A. An infant suffering from gastroenteritis for three days
B. An elderly client suffering from a type I decubitus
C. Adults with impaired cardiac function
D. Clients who are confused

55. An elderly patient was hydrated with lactated Ringer's solution in the emergency room for the last hour. During the most recent evaluation of the patient by the nurse, a finding of a rapid bounding pulse and shortness of breath were noted. Reporting this episode to the physician, the nurse suspects that the patient now shows signs of:
A. Hypovolemia, and needs more fluids
B. Hypervolemia, and needs the fluids adjusted
C. An acid-base disturbance
D. Needing no adjustment in fluid administration

56. A client taking lasix (furosemide) for congestive heart failure is seeing the physician for a potassium value of 3.0. An order for oral potassium taken daily is written and discussed with the client. In addition, potassium-rich foods should be eaten. The nurse educator meets

with this client and has the client identify all of the following foods as potassium-rich except:
A. Baked potato
B. White bread
C. Apricot
D. Orange juice

57. Edema that forms in clients with kidney disease is due to:
A. Reduced plasma oncotic pressure, so that fluid is not drawn into the capillaries from interstitial tissues
B. Decreased capillary hydrostatic pressures pushing fluid into the interstitial tissues
C. Capillaries becoming less permeable, allowing fluid to escape into interstitial tissues
D. Obstructed lymph flow that assists the movement of fluid from the interstitial tissues back into the vascular compartment

58. A client suffering from a narcotic overdose is seen in the Emergency Department. The client is confused, with warm, flushed skin, headache, and weakness. Vital signs are T 102.6, HR 128, R 24, and BP 130/86. A blood gas analysis sample was drawn on room air, and the results are as follows: pH 7.33, PaCO2 53, PaO2 72, HCO3 24. This client is at risk for:
A. Respiratory acidosis
B. Respiratory alkalosis
C. Metabolic acidosis
D. Metabolic alkalosis

59. Measurements related to fluid balance of clients that a nurse can initiate without a physician's order include:
A. Daily weights, vital signs, and fluid intake and output
B. Daily weights, diuretics, and waist measurement
C. Monitoring temperature, fluid intake and output, and calorie count
D. Auscultating lung sounds, monitoring color of urine, and placing a Foley catheter into the client

60. The nurse has been invited to discuss "the importance of promoting a good fluid and electrolyte balance in children" for a group of parents at the local school parents club meeting. Of the following actions, which is not representative of this topic?
A. Recognizing possible risk factors for fluid and electrolyte balance, such as prolonged or repeated vomiting, frequent watery stools, or inability to consume fluids
B. Increasing fluid intake before, during, and after strenuous exercise, particularly when the environmental temperature is high, and replacing lost electrolytes from excessive perspiration as needed with commercial electrolyte solutions
C. Consuming six to eight glasses of water daily
D. Encouraging excessive amounts of foods or fluids high in salt or caffeine

61. The nurse is admitting a new client, 80 years old, with congestive heart failure into your home health agency. The following assessment findings have been determined after meeting the client: overweight but no gain since the client left the hospital two days ago; VS: T 99.0, HR 100, R 22, BP 130/86. Foods eaten include canned soup at each meal, ham, and cheese. When completing the care plan for this client, the nurse should include which of the following nursing diagnosis:
A. Improved Gas Exchange
B. Risk for Fluid Volume Deficit
C. Risk for Fluid Volume Imbalance
D. Impaired Skin Integrity

62. The results of an arterial blood gas are as follows: pH: 7.5, PaCO2: 50, PaO2: 88, HCO3: 28; Base excess: +5. Evaluate the acid-base imbalance.
A. Metabolic Acidosis with base compensation
B. Metabolic Alkalosis with a respiratory compensation
C. Respiratory Acidosis with a base compensation
D. Respiratory Acidosis with a respiratory compensation

63. Following surgery, the client requires a blood transfusion. The main reason the nurse wants to complete the unit transfusion within a four-hour period that blood:
A. Hanging for longer than four hours creates an increased risk of sepsis
B. May clot in the bag
C. May evaporate
D. May not clot in the recipient after this time period

64. Nurse would be most concerned about which lab values obtained from a client receiving furosemide (Lasix) therapy?
A. BUN 20
B. K 3.4
C. Creatinine 1.1
D. K 3.2

65. The nurse should observe for a Trousseau sign (a carpopedal spasm) in her patient with which of the following electrolyte abnormalities?
A. Hypokalemia
B. Hyponatremia
C. Hypochloremia
D. Hypocalcemia

66. A nurse inserts a nasogastric tube, and it immediately drains 1000 mL of fluid. Which of the following electrolyte levels should she be most concerned with at this time?
A. Na
B. K
C. Cl
D. CO2

67. The WBC count of a patient is 18,000 which the nurse attributes to which of the following health problems?
A. Arthritis
B. Alcoholism
C. Viral infection
D. Wound dehisience

68. The majority of the body's water is contained in which of the following fluid compartments?
A. Interstitial
B. Intracellular
C. Extracellular
D. Intravascular

69. If the blood plasma has a higher osmolality than the fluid within a red blood cell, the mechanism involved in equalizing the fluid concentration is:
A. Osmosis
B. Diffusion
C. Active transport
D. Facilitated diffusion

70. An elderly woman was admitted to the medical unit with dehydration. A clinical indication of this problem could be:
A. Weight Loss
B. Full bounding pulse
C. Engorged neck veins
D. Kussmaul respiration

71. You are caring for a patient with hyponatremia. Your nursing care plan might include what?
A. Fluid restriction
B. Administration of hypotonic IV fluids
C. Administration of a cation exchange resin
D. Increased water intake for patients on nasogastric suction

72. A nurse is caring for a patient receiving a loop diuretic. The nurse should be alert for which of the following symptoms?
A. Restlessness and agitation

B. Paresthesis and irritability
C. Weak, irregular pulse and poor muscle tone
D. Increased blood pressure and muscle spasms

73. Which of the following patients would be at the greatest risk for the potential development of hypermagnesemia?
A. 83 year old man with lung cancer and hypertension
B. 65 year old woman with hypertension, taking adrenergic blockers
C. 42 year old woman with systemic lupus erythmatosus and renal failure
D. 50 year old man with benign prostatic hyperplasia and a urinary tract infection

74. It is especially important for the nurse to assess for which of the following in a patient who has just undergone a total thyroidectomy?
A. Weight gain
B. Depressed reflexes
C. Positive Chvostek's sign
D. Confusion and personality changes

75. The nurse anticipates that the patient with hyperphosphatemia secondary to renal failure will require what?
A. Calcium supplements
B. Potassium supplements
C. Magnesium supplements
D. Fluid replacement therapy

76. The lungs act as an acid-base buffer by:
A. Increasing respiratory rate and depth when CO2 levels in the blood are high, reducing acid load.
B. Increasing respiratory rate and depth when CO2 levels in the blood are low, reducing base load.
C. Decreasing respiratory rate and depth when CO2 levels in the blood are high, reducing acid load.
D. Decreasing respiratory rate and depth when CO2 levels in the blood are low, increasing acid load.

77. The topical fluid replacement for the patient with an ICF fluid volume deficit is:
A. Isotonic
B. Hypotonic
C. Hypertonic
D. A plasma expander

78. A client with a history of cardiac disease is taking a potassium-wasting diuretic (furosemide) and is seen in the ER for complaints of weakness. Her nurse should expect to evaluate which laboratory values?
A. Albumin and protein levels
B. Sodium and chloride levels
C. Potassium and blood glucose levels
D. Hemoglobin level and hematocrit

79. The following clients are all at risk for fluid volume excess. Which of them should you see first?
A. 88 year old patient with a fractured femur scheduled for surgery
B. 20 year old patient with a 6 year history of type 1 diabetes mellitus
C. 65 year old patient recently diagnosed with congestive heart failure
D. 50 year old patient with second degree burns on the ankles and feet

80. A nurse assesses the following patients. Which patient is at greatest risk for the development of hypocalcemia?
A. 56 year old with acute renal failure
B. 40 year old with systemic lupus erythematousus
C. 28 year old who has just undergone a total thyriodectomy
D. 65 year old with hypertension taking beta-adrenergic blockers

81. Clinical assessment of dehydration can be confirmed with what findings?
A. 1 lb weight loss
B. Engorged neck vessels
C. Dry mucous membranes
D. Full bounding radial pulse

82. The nurse anticipates that the physician will order what kind of intravenous (IV) fluid for a patient who is dehydrated?
A. Ringer's lactate
B. 3% sodium chloride
C. 0.9% sodium chloride
D. 0.45% sodium chloride

83. The physician has ordered that a patient with hypertension begin receiving a thiazide diuretic. The nurse knows that she needs to now closely monitor the client for what condition?
A. Hypokalemia
B. Hyponatremia
C. Hypercalcemia
D. Hypermagnesemia

84. A nurse is collecting a sample for a blood gas analysis from a patients left wrist. After drawing the blood into the syringe, the nurse:
A. Adds a drop of heparin to the sample to prevent clotting
B. Seals the end of the syringe and places it in a cup of crushed ice and water
C. Places the syringe of blood in a dark bag to protect the specimen from light
D. Seals the syringe in a zip-lock bag and places the specimen in the out box for lab pickup

85. A nurse is conducting an assessment of a patient who has an IV via a central line. The tubing is dated 4 days ago. The nurse knows that the tubing:
A. Is good for 3 more days, for a total of 7 days
B. Can remain in place as long as there is not a disconnection
C. Needs changing because it is beyond the 3 day recommended limit
D. Needs changing, including the IV port, because they have been in place for 4 days

86. One of the most common electrolyte imbalances is:
A. Hypokalemia
B. Hyponatremia
C. Hypercalcemia
D. Hypermagnesemia

87. Which of the following patients is most at risk for fluid volume defecit (FVD)?
A. Elder adult
B. Adult
C. Child
D. Infant

88. One reason older adults experience fluid and electrolyte imbalance and acid-base imbalances, is they:
A. Eat poor quality foods
B. Have a decreased thirst sensation
C. Have more stress response
D. Have an overly active thirst response

89. Which of the following would be included in a recording of output on and I/O sheet? (Select all that apply)
A. Urine
B. Sweat
C. Diarrhea
D. Vomit
E. Gastric suction
F. Sputum
G. Wound drainage

90. Health promotion activities for fluid and electrolyte imbalance focuses primarily on what?
A. Patient teaching
B. Dietary intake
C. Medication
D. Physician involvement in care

91. Many factors are initially controlled for the IV insertion procedure. The nurse understands this begins with:
A. Hand washing
B. Checking sterility of supplies
C. 6 med rights
D. Checking IV order

92. What is the nurse's primary concern regarding fluid & electrolytes when caring for an elderly patient who is intermittently confused?
A. Risk of dehydration
B. Risk of kidney damage
C. Risk of stroke
D. Risk of bleeding

93. A nurse is planning care for a patient with severe burns. Which of the following is this patient at risk for developing?
A. Intracellular fluid deficit
B. Intracellular fluid overload
C. Extracellular fluid deficit
D. Interstitial fluid deficit

94. A patient is experiencing multisystem fluid volume deficit, is tachycardic, pale, cool skinned and has a decreased urine output. His nurse realizes these findings are most likely a direct result of which of the following?
A. The body's natural compensatory mechanisms
B. Pharmacological effects of a diuretic
C. Effects of rapidly infused IV fluids
D. Cardiac failure

95. A pregnant patient is complaining of excessive thirst, increased urination and has a medical diagnosis of diabetes insipidus. The nurse chooses which of the following nursing diagnoses as most appropriate for her?
A. Risk for imbalanced fluid volume
B. Excess fluid volume
C. Imbalanced nutrition
D. Ineffective tissue perfusion

96. A patient who is recovering from surgery has an indwelling urinary catheter. The nurse would contact the patients physician with which of the following 24 hour urine output volumes?
A. 600 mL
B. 750 mL
C. 1000 mL
D. 1200 mL

97. A patient is getting IV fluids postoperatively following cardiac surgery. What posoperative complication potential should the nurse focus their assessment on?
A. Fluid volume excess
B. Fluid volume deficit
C. Seizure activity
D. Liver failure

98. A patient is diagnosed with severe hyponatremia. The nurse realizes this patient will most likely need which of the following precautions implemented?
A. Seizure
B. Infection
C. Neutropenic
D. High-risk falls

99. A patient has hypokalemia. After reviewing the patients medications list, which of the following might the nurse suspect contributed to the patients health problem?
A. Corticosteroid
B. Thiazide diuretic
C. Narcotic
D. Muscle relaxer

100. A patient prescribed spironolactone is demonstrating ECG changes & complaining of muscle weakness. The nurse realizes this patient is exhibiting signs of which of the following?
A. Hypokalemia
B. Hypokalemia
C. Hypercalcemia
D. Hypocalcemia

101. A nurse is planning care for her patient with fluid volume overload and hyponatremia. Which of the following should be included in this patients plan of care?
A. Restrict fluids
B. Administer IV fluids
C. Provide Kayexalate
D. Administer IV normal saline with furosemide

102. When caring for a patient with hypocalcemia, which of the following symptoms should the nurse additionally assess in the patient?
A. Other electrolyte disturbances
B. Hypertension
C. Visual disturbances
D. Drug toxicity

103. A patient with a history of stomach ulcers is diagnosed with hypophosphatemia. Which of the following interventions should the nurse include into the patients plan of care?
A. Request a dietitian consult for selecting foods high in phosphorous
B. Provide aluminum hydroxide antacids as prescribed
C. Instruct patient to avoid poultry, peanuts & seeds
D. Instruct patient to avoid the intake of sodium phosphate.

104. When analyzing an arterial blood gas report of a patient with COPD & respiratory acidosis, the nurse anticipates that compensation will develop through which of the following mechanisms?
A. The kidneys retain bicarbonate
B. The kidneys excrete bicarbonate
C. The lungs will retain carbon dioxide
D. The lungs will excrete carbon dioxide

105. A nurse is caring for a patient diagnosed with renal failure. Which of the following does the nurse recognize as compensation for the acid-base disturbance found in patients with renal failure?
A. The patient breathes rapidly to eliminate carbon dioxide
B. The patient will retain bicarbonate in excess of normal
C. The pH will decrease from the present value
D. The patients oxygen saturation level will improve

106. When caring for a group of patients, the nurse realizes that which of the following health problems increases the risk for metabolic alkalosis?
A. Bulimia
B. Dialysis
C. Venous stasis ulcer
D. COPD

107. A nurse is caring for a patient who is anxious & dizzy following a traumatic event. The arterial blood gas findings are: pH 7.48, PaO2 110, PaCo2 25, & HCO3 24. The nurse should anticipate which initial intervention to correct this problem?
A. Encourage the patient to breathe in & out slowly into a paper bag
B. Immediately administer oxygen via a mask & monitor oxygen saturation
C. Prepare to start an IV fluid bolus using isotonic fluids
D. Anticipate the administration of intravenous sodium bicarbonate

108. A patient is prescribed 20 mEq of potassium chloride. The nurse realizes that the reason the patient is receiving this replacement is:
A. To sustain respiratory function
B. To help regulate acid-base balance

C. To keep a vein open
D. To encourage urine output

109. An elderly patient does not complain of thirst. What should the nurse do to assess that this patient is not dehydrated?
A. Ask the physician for an order to begin IV fluid replacement
B. Ask the physician to order a chest x-ray
C. Assess the urine for osmolality
D. Ask the physician for an order for a brain scan

110. An elderly patient who is being medicated for pain had an episode of incontinence. The nurse realizes that this patient is at risk for developing:
A. Dehydration
B. Over-hydration
C. Fecal incontinence
D. A stroke

111. The nurse assesses a patients weight loss as being 22 lbs. How many liters of fluid did this patient lose?
A. 10 L (1kg or 2.2 lbs)
B. 15 L (1.5kg or 3 lbs)

112. A postoperative patient with a fluid volume deficit is prescribed progressive ambulation yet is weak from an inadepuate fluid status. What can the nurse do to help this patient?
A. Assist the patient to maintain a standing positions for several minutes
B. This patient should be on bed rest
C. Assist the patient to move into different positions in stages
D. Contact physical therapy to provide a walker

113. A postoperative patient is diagnosed with fluid volume overload. Which of the following should the nurse assess in this patient?
A. Poor skin turgor
B. Decreased urine output
C. Distended neck veins
D. Concentrated hemoglobin & hematocrit levels

114. An elderly patient is at home after being diagnosed with fluid volume overload. Which of the following should the home care nurse instruct this patient to do?
A. Wear support hose
B. Keep legs in a dependent position
C. Avouid wearing shoes while in the home
D. Try to sleep without extra pillows

115. A patient with fluid retention related to renal problems is admitted to the hospital. The nurse realizes that this patient could possibly have which of the following electrolyte imbalances?
A. Hypokalemia
B. Hypernatremia
C. Carbon Dioxide
D. Magnesium

116. An elderly patient comes into the clinic with a complaint of watery diarrhea for several days with abdominal & muscle cramping. The nurse realizes that this patient is demonstrating which of the following?
A. Hypernatremia
B. Hyponatrema
C. Fluid volmue excess
D. Hyperkalemia

117. A patient is admitted with hypernatremia caused by being stranded on a boat in the Atlantic Ocean for five days without a fresh water source. Which of the following is this patient at risk for developing?
A. Pulmonary edema
B. Atrial dysrhythmias
C. Cerebral bleeding
D. Stress fractures

118. A nurse is admitting a patient who was diagnosed with acute renal failure. Which of the following electrolytes will be most affected with this disorder?
A. Calcium
B. Magnesium
C. Phosphorous
D. Potassium

119. A patient who is taking digoxin is admitted with possible hypokalemia. Which of the following does the nurse realize might occur with this patient?
A. Digoxin toxicity may occur
B. A higher dose of digoxin may be needed
C. A diuretic may be needed.
D. Fluid volume deficit may occur

120. A patient is prescribed 40 mEq potassium as a replacement. The nurse realizes that this replacement should be administered:
A. Directly into the venous access line
B. Mixed in the prescribed IV fluid
C. Via a rectal suppository
D. Via intramuscular injection

121. An elderly patient with a history of sodium retention arrives to the clinic with the complaints of "heart skipping beats" and leg tremors. Which of the following should the nurse ask this patient regarding these symptoms?
A. "Have you stopped taking your digoxin medication?".
B. "When was the last time you had a bowel movement?"
C. "Were you doing any unusual phyical activity?"
D. "Are you using a solt substiture

122. A 35 year old female comes into the clinic postoperative parathyroidectomy. Which of the following should the nurse instruct the patient?
A. Drink one glass of red wine per day.
B. Avoid the sun.
C. Milk & milk-based products will ensure an adequate calcium intake.
D. Red meat is the protein source of choice.

123. A patient is admitted for treatment of hypercalcemia. The nurse realizes that this patients IV fluids will most likely be which of the following?
A. Dextrose 5% & water
B. Dextrose 5% & ? normal saline
C. Dextrose 5% & 95% normal saline
D. Normal saline

124. A 28 year old male patient is admitted with diabetic ketoacidosis. The nurse realizes that this patient will have a need for which of the following electrolytes?
A. Sodium
B. Potassium
C. Calcium
D. Magnesium

125. A elderly patient with peripheral neuropathy has been taking magnesium supplements. The nurse realizes that which of the following symptoms can indicate hypomagnesaemia?
A. Hypotension, warmth, & sweating
B. Nausea & vomiting
C. Hyperreflexia
D. excessive urination

126. A patient is admitted with burns over 50% of his body. The nurse realizes that this patient is at risk for which of the following electrolyte imbalances?
A. Hypercalcemia
B. Hypophosphatemia
C. Hypernatremia
D. Hypermagnesemia

127. A patient is diagnosed with hyperphosphatemia. The nurse realizes that this patient might also have an imbalance of which of the following electrolytes?

A. Calcium
B. Sodium
C. Potassium
D. Chloride

128. The nurse is reviewing a patients blood pH level. Which of the systems in the body regulate blood pH? (Select all that apply)
A. Renal
B. Cardiac
C. Buffers
D. Respiratory

129. The nurse observes a patients respirations and notes that the rate is 30 per minute & the respirations are very deep. The metabolic disorder this patient might be demonstrating is which of the following?
A. Hypernatremia
B. Increasing carbon dioxide in the blood
C. Hypertension
D. Pain

130. The blood gases of a patient with an acid-base disorder show a blood pH outside of normal limits. The nurse realizes that this patient is:
A. Fully compensated
B. Demonstrating anaerobic metabolism
C Partially compensated
D. In need of intravenous fluids.

131. A patients blood gases show a pH greater than 7.53 & bicarbonate level of 35 mEq/L. The nurse realizes that the acid-base disorder this patient is demonstrating is which of the following?
A. Respiratory acidosis
B. Metabolic acidosis
C. Respiratory alkalosis
D. Metabolic alkalosis

132. An elderly postoperative patient is demonstrating lethargy, confusion, & a respiration rate of 8 per minute. The nurse sees that the last dose of pain medication administered via a patient controlled anesthesia (PCA) pump was within 30 minutes. Which of the following acid-base disorders might this patient be experiencing?
A. Respiratory acidosis
B. Metabolic acidosis
C. Respiratory alkalosis
D. Metabolic alkalosis

133. The patient has been placed on a 1200 mL daily fluid restriction. The patients IV is infusing at a keep open rate of 10 mL/hr. The patient has no additional IV medications. How much fluid should the patient be allowed from 0700 until 1500 daily?
A. 540 mL
B. 960 ml
C. 1200 mL
D. 10 mL

134. The patient is receiving IV potassium (KCL). Which nursing actions are required? (Select all that apply)
A. Administer the dose IV push over 3 minutes
B. Monitor the injection site for redness
C. Add the ordered dose to the IV hanging.
D. Use an infusion controller for the IV
E. Monitor fluid intake & output

135. Which patients are at risk for the development of hypercalcemia? (Select all that apply)
A. The patient with a malignancy
B. The patient taking lithium
C. The patient who uses sunscreen to excess
D. The patient with hyperparathyroidism
E. The patient who overuses antacids

136. The patient who has a serum magnesium level of 1.4 mg/dL is being treated with dietary modification. Which foods should the nurse suggest for this patient? (Select all that apply)
A. Bananas
B. Seafood
C. White rice
D. Lean red meat
E. Chocolate

137. The patient has a serum phospate level of 4.7 mg/dL. Which interdisciplinary treatments would the nurse expect for this patient? (Select all that apply)
A. IV normal saline
B. Calcium containing antacids
C. IV potassium phosphate
D. Encouraging milk intake
E. Increasing vitamin D intake

138. The patient, newly diagnosed with diabetes mellitus, is admitted to the emergency department with nausea, vomiting, and abdominal pain. ABG results reveal a pH of 7.2 & a bicarbonate level of 20 mEq/L. Which other assessment findings would the nurse anticipate in this patient? (Select all that apply)
A. Tachycardia
B. Weakness
C. Dysrhythmias
D. Kussmaul's respirations
E. Cold, Clammy skin

139. A client develops decreased renal function and requires a change in antibiotic dosage. On which factor should the physician base the dosage change?
A. Therapeutic index
B. GI absorption rate
C. Liver function studies
D. Creatinine clearance

140. A history of infection specifically caused by group A beta-hemolytic streptococci is associated with which of the following disorders?
A. Acute glomerulonephritis
B. Acute renal failure
C. Nephrotic syndrome
D. Chronic renal failure

141. A client admitted with a gunshot wound to the abdomen is transferred to the intensive care unit after an exploratory laparotomy. IV fluid is being infused at 150 ml/hour. Which assessment finding suggests that the client is experiencing acute renal failure (ARF)?
A. Urine output of 250 ml/24 hr
B. Temperature of 100.2 F (37.8 C)
C. Serum creatinine level of 1.2 mg/dl
D. Blood urea nitrogen (BUN) level of 22 mg/dl

142. What is the normal range in adult arterial blood lab measurements for pH?
A. 7.0 - 7.5
B. 7.35 - 7.45
C. 7.25 - 7.35
D. 7.5 - 8.0

143. What is the normal range in adult arterial blood lab measurements for PaCO2 (partial pressure of carbon dioxide)?
A. 4.7 - 6 mm Hg
B. 15.1 - 20.0 mm Hg
C. 35 - 45 mm Hg
D. 30 - 50 mm Hg

144. What is the normal range in adult arterial blood lab measurements for HCO-3 (bicarbonate)?
A. 22 - 26 mEq/L
B. 15 - 20 mEq/L
C. 25 - 30 mEq/L
D. 10 - 17 mEq/L

145. What is the normal range in adult arterial blood lab measurements for PaO2 (partial pressure of oxygen)?
A. 60 - 100 mm Hg
B. 50 - 75 mm Hg
C. 80 - 120 mm Hg

D. 80 - 100 mm Hg

146. What is the normal range in adult arterial blood lab measurements for SaO2 (oxygen saturation)?
A. 88% - 100%
B. 90% - 95%
C. 95% - 100%
D. 80% - 100%

147. What is the normal range in adult arterial blood lab measurements for Base Excess (buffer capacity)?
A. 0 - 2 mmol/L
B. -2 to +2 mmol/L
C. -1 to +1 mmol/L
D. 0 - 5 mmol/L

148. What electrolyte can be easily absorbed by eating fruits, potatoes, instant coffee, molasses, and brazil nuts?
A. Potassium (K+)
B. Calcium (Ca2+)
C. Magnesium (Mg2+)
D. Phosphate (PO4)

149. What electrolyte requires vitamin D for best absorbtion and absorbtion of it can be hindered by undigested fat? It is best obtained by eating dairy products, canned fish with bones, broccoli and oranges.
A. Potassium (K+)
B. Calcium (Ca2+)
C. Magnesium (Mg2+)
D. Phosphate (PO4)

150. What electrolytes absorbtion is hindered by undigested fat and can be obtained by eating dark green leafy vegetables and whole grains?
A. Potassium (K+)
B. Calcium (Ca2+)
C. Magnesium (Mg2+)
D. Phosphate (PO4)

ANSWERS

1	A	26	E	51	B	76	A	101	A	126	B
2	D	27	F	52	A	77	B	102	A	127	A
3	B	28	A	53	A	78	C	103	A	128	A,C,D
4	B	29	B	54	B	79	C	104	A	129	B
5	C	30	C	55	B	80	A	105	A	130	C
6	A,C	31	D	56	B	81	C	106	A	131	D
7	A,D	32	A	57	A	82	D	107	A	132	A
8	C	33	B	58	B	83	A	108	B	133	A
9	A	34	C	59	A	84	B	109	C	134	B,D,E
10	D	35	D	60	D	85	C	110	A	135	A,B,D,E
11	D	36	E	61	C	86	A	111	A	136	A,B,E
12	B	37	A	62	B	87	D	112	C	137	A,B
13	C	38	B	63	A	88	B	113	C	138	B,C,D
14	B	39	C	64	D	89	A,C,D,E,G	114	A	139	D
15	E,F,D,A,B,C,	40	C	65	D	90	A	115	B	140	A
16	A	41	D	66	B	91	A	116	B	141	A
17	B	42	B	67	D	92	A	117	C	142	B
18	C	43	C	68	B	93	A	118	D	143	C
19	D	44	D	69	A	94	A	119	A	144	A
20	A	45	D	70	A	95	A	120	B	145	D
21	B	46	C	71	A	96	A	121	D	146	C
22	A	47	A	72	C	97	A	122	C	147	B
23	B	48	C	73	C	98	A	123	D	148	A
24	C	49	B	74	C	99	A	124	D	149	B
25	D	50	D	75	A	100	A	125	A	150	C