1. Mrs. Chua a 78 year old client is admitted with the diagnosis of mild chronic heart failure. The nurse expects to hear when listening to client’s lungs indicative of chronic heart failure would be:

   a. Stridor
   b. Crackles
   c. Wheezes
   d. Friction rubs

2. Patrick who is hospitalized following a myocardial infarction asks the nurse why he is taking morphine. The nurse explains that morphine:

   a. Decrease anxiety and restlessness
   b. Prevents shock and relieves pain
   c. Dilates coronary blood vessels
   d. Helps prevent fibrillation of the heart

3. Which of the following should the nurse teach the client about the signs of digitalis toxicity?

   a. Increased appetite
   b. Elevated blood pressure
   c. Skin rash over the chest and back
   d. Visual disturbances such as seeing yellow spots

4. Nurse Trisha teaches a client with heart failure to take oral Furosemide in the morning. The reason for this is to help:

   a. Retard rapid drug absorption
   b. Excrete excessive fluids accumulated at night
   c. Prevents sleep disturbances during night
   d. Prevention of electrolyte imbalance
5. What would be the primary goal of therapy for a client with pulmonary edema and heart failure?
   a. Enhance comfort
   b. Increase cardiac output
   c. Improve respiratory status
   d. Peripheral edema decreased

6. Nurse Linda is caring for a client with head injury and monitoring the client with decerebrate posturing. Which of the following is a characteristic of this type of posturing?
   a. Upper extremity flexion with lower extremity flexion
   b. Upper extremity flexion with lower extremity extension
   c. Extension of the extremities after a stimulus
   d. Flexion of the extremities after stimulus

7. A female client is taking Cascara Sagrada. Nurse Betty informs the client that the following maybe experienced as side effects of this medication:
   a. GI bleeding
   b. Peptic ulcer disease
   c. Abdominal cramps
   d. Partial bowel obstruction

8. Dr. Marquez orders a continuous intravenous nitroglycerin infusion for the client suffering from myocardial infarction. Which of the following is the most essential nursing action?
   a. Monitoring urine output frequently
   b. Monitoring blood pressure every 4 hours
   c. Obtaining serum potassium levels daily
   d. Obtaining infusion pump for the medication

9. During the second day of hospitalization of the client after a Myocardial Infarction. Which of the following is an expected outcome?
a. Able to perform self-care activities without pain

b. Severe chest pain

c. Can recognize the risk factors of Myocardial Infarction

d. Can Participate in cardiac rehabilitation walking program

10. A 68 year old client is diagnosed with a right-sided brain attack and is admitted to the hospital. In caring for this client, the nurse should plan to:

a. Application of elastic stockings to prevent flaccid by muscle

b. Use hand roll and extend the left upper extremity on a pillow to prevent contractions

c. Use a bed cradle to prevent dorsiflexion of feet

d. Do passive range of motion exercise

11. Nurse Liza is assigned to care for a client who has returned to the nursing unit after left nephrectomy. Nurse Liza’s highest priority would be…

a. Hourly urine output

b. Temperature

c. Able to turn side to side

d. Able to sips clear liquid

12. A 64 year old male client with a long history of cardiovascular problem including hypertension and angina is to be scheduled for cardiac catheterization. During pre cardiac catheterization teaching, Nurse Cherry should inform the client that the primary purpose of the procedure is…..

a. To determine the existence of CHD

b. To visualize the disease process in the coronary arteries

c. To obtain the heart chambers pressure

d. To measure oxygen content of different heart chambers

13. During the first several hours after a cardiac catheterization, it would be most essential for nurse Cherry to….
a. Elevate clients bed at 45°

b. Instruct the client to cough and deep breathe every 2 hours

c. Frequently monitor client’s apical pulse and blood pressure

d. Monitor clients temperature every hour

14. Kate who has undergone mitral valve replacement suddenly experiences continuous bleeding from the surgical incision during postoperative period. Which of the following pharmaceutical agents should Nurse Aiza prepare to administer to Kate?

a. Protamine Sulfate

b. Quinidine Sulfate

c. Vitamin C

d. Coumadin

15. In reducing the risk of endocarditis, good dental care is an important measure. To promote good dental care in client with mitral stenosis in teaching plan should include proper use of…

a. Dental floss

b. Electric toothbrush

c. Manual toothbrush

d. Irrigation device

16. Among the following signs and symptoms, which would most likely be present in a client with mitral gurgitation?

a. Altered level of consciousness

b. Exceptional Dyspnea

c. Increase creatine phospholinase concentration

d. Chest pain

17. Kris with a history of chronic infection of the urinary system complains of urinary frequency and burning sensation. To figure out whether the current problem is in renal origin, the nurse should assess whether the client has discomfort or pain in the…
a. Urinary meatus
b. Pain in the Labium
c. Suprapubic area
d. Right or left costovertebral angle

18. Nurse Perry is evaluating the renal function of a male client. After documenting urine volume and characteristics, Nurse Perry assesses which signs as the best indicator of renal function.

   a. Blood pressure
   b. Consciousness
   c. Distension of the bladder
   d. Pulse rate

19. John suddenly experiences a seizure, and Nurse Gina notice that John exhibits uncontrollable jerking movements. Nurse Gina documents that John experienced which type of seizure?

   a. Tonic seizure
   b. Absence seizure
   c. Myoclonic seizure
   d. Clonic seizure

20. Smoking cessation is critical strategy for the client with Burgher’s disease, Nurse Jasmin anticipates that the male client will go home with a prescription for which medication?

   a. Paracetamol
   b. Ibuprofen
   c. Nitroglycerin
   d. Nicotine (Nicotrol)

21. Nurse Lilly has been assigned to a client with Raynaud’s disease. Nurse Lilly realizes that the etiology of the disease is unknown but it is characterized by:
22. Nurse Jamie should explain to male client with diabetes that self-monitoring of blood glucose is preferred to urine glucose testing because…

a. More accurate
b. Can be done by the client
c. It is easy to perform
d. It is not influenced by drugs

23. Jessie weighed 210 pounds on admission to the hospital. After 2 days of diuretic therapy, Jessie weighs 205.5 pounds. The nurse could estimate the amount of fluid Jessie has lost…

a. 0.3 L
b. 1.5 L
c. 2.0 L
d. 3.5 L

24. Nurse Donna is aware that the shift of body fluids associated with Intravenous administration of albumin occurs in the process of:

a. Osmosis
b. Diffusion
c. Active transport
d. Filtration

25. Myrna a 52 year old client with a fractured left tibia has a long leg cast and she is using crutches to ambulate. Nurse Joy assesses for which sign and symptom that indicates complication associated with crutch walking?

a. Left leg discomfort
b. Weak biceps brachii  
c. Triceps muscle spasm  
d. Forearm weakness

26. Which of the following statements should the nurse teach the neutropenic client and his family to avoid?

a. Performing oral hygiene after every meal  
b. Using suppositories or enemas  
c. Performing perineal hygiene after each bowel movement  
d. Using a filter mask

27. A female client is experiencing painful and rigid abdomen and is diagnosed with perforated peptic ulcer. A surgery has been scheduled and a nasogastric tube is inserted. The nurse should place the client before surgery in

a. Sims position  
b. Supine position  
c. Semi-fowlers position  
d. Dorsal recumbent position

28. Which nursing intervention ensures adequate ventilating exchange after surgery?

a. Remove the airway only when client is fully conscious  
b. Assess for hypoventilation by auscultating the lungs  
c. Position client laterally with the neck extended  
d. Maintain humidified oxygen via nasal canula

29. George who has undergone thoracic surgery has chest tube connected to a water-seal drainage system attached to suction. Presence of excessive bubbling is identified in water-seal chamber, the nurse should…

a. “Strip” the chest tube catheter  
b. Check the system for air leaks
c. Recognize the system is functioning correctly

d. Decrease the amount of suction pressure

30. A client who has been diagnosed of hypertension is being taught to restrict intake of sodium. The nurse would know that the teachings are effective if the client states that…

a. I can eat celery sticks and carrots

b. I can eat broiled scallops

c. I can eat shredded wheat cereal

d. I can eat spaghetti on rye bread

31. A male client with a history of cirrhosis and alcoholism is admitted with severe dyspnea resulted to ascites. The nurse should be aware that the ascites is most likely the result of increased…

a. Pressure in the portal vein

b. Production of serum albumin

c. Secretion of bile salts

d.Interstitial osmotic pressure

32. A newly admitted client is diagnosed with Hodgkin’s disease undergoes an excisional cervical lymph node biopsy under local anesthesia. What does the nurse assess first after the procedure?

a. Vital signs

b. Incision site

c. Airway

d. Level of consciousness

33. A client has 15% blood loss. Which of the following nursing assessment findings indicates hypovolemic shock?

a. Systolic blood pressure less than 90mm Hg

b. Pupils unequally dilated
c. Respiratory rate of 4 breath/min

d. Pulse rate less than 60 bpm

34. Nurse Lucy is planning to give pre operative teaching to a client who will be undergoing rhinoplasty. Which of the following should be included?

a. Results of the surgery will be immediately noticeable postoperatively

b. Normal saline nose drops will need to be administered preoperatively

c. After surgery, nasal packing will be in place 8 to 10 days

d. Aspirin containing medications should not be taken 14 days before surgery

35. Paul is admitted to the hospital due to metabolic acidosis caused by Diabetic ketoacidosis (DKA). The nurse prepares which of the following medications as an initial treatment for this problem?

a. Regular insulin

b. Potassium

c. Sodium bicarbonate

d. Calcium gluconate

36. Dr. Marquez tells a client that an increase intake of foods that are rich in Vitamin E and beta-carotene are important for healthier skin. The nurse teaches the client that excellent food sources of both of these substances are:

a. Fish and fruit jam

b. Oranges and grapefruit

c. Carrots and potatoes

d. Spinach and mangoes

37. A client has Gastroesophageal Reflux Disease (GERD). The nurse should teach the client that after every meals, the client should…

a. Rest in sitting position

b. Take a short walk
c. Drink plenty of water
d. Lie down at least 30 minutes

38. After gastroscopy, an adaptation that indicates major complication would be:
   a. Nausea and vomiting
   b. Abdominal distention
   c. Increased GI motility
   d. Difficulty in swallowing

39. A client who has undergone a cholecystectomy asks the nurse whether there are any dietary restrictions that must be followed. Nurse Hilary would recognize that the dietary teaching was well understood when the client tells a family member that:
   a. “Most people need to eat a high protein diet for 12 months after surgery”
   b. “I should not eat those foods that upset me before the surgery”
   c. “I should avoid fatty foods as long as I live”
   d. “Most people can tolerate regular diet after this type of surgery”

40. Nurse Rachel teaches a client who has been recently diagnosed with hepatitis A about untoward signs and symptoms related to Hepatitis that may develop. The one that should be reported immediately to the physician is:
   a. Restlessness
   b. Yellow urine
   c. Nausea
   d. Clay-colored stools

41. Which of the following antituberculosis drugs can damage the 8th cranial nerve?
   a. Isoniazid (INH)
   b. Paraoaminosalicylic acid (PAS)
   c. Ethambutol hydrochloride (myambutol)
d. Streptomycin

42. The client asks Nurse Annie the causes of peptic ulcer. Nurse Annie responds that recent research indicates that peptic ulcers are the result of which of the following:
   a. Genetic defect in gastric mucosa
   b. Stress
   c. Diet high in fat
   d. Helicobacter pylori infection

43. Ryan has undergone subtotal gastrectomy. The nurse should expect that nasogastric tube drainage will be what color for about 12 to 24 hours after surgery?
   a. Bile green
   b. Bright red
   c. Cloudy white
   d. Dark brown

44. Nurse Joan is assigned to come for client who has just undergone eye surgery. Nurse Joan plans to teach the client activities that are permitted during the post operative period. Which of the following is best recommended for the client?
   a. Watching circus
   b. Bending over
   c. Watching TV
   d. Lifting objects

45. A client suffered from a lower leg injury and seeks treatment in the emergency room. There is a prominent deformity to the lower aspect of the leg, and the injured leg appears shorter than the other leg. The affected leg is painful, swollen and beginning to become ecchymotic. The nurse interprets that the client is experiencing:
   a. Fracture
   b. Strain
   c. Sprain
d. Contusion

46. Nurse Jenny is instilling an otic solution into an adult male client left ear. Nurse Jenny avoids doing which of the following as part of the procedure

a. Pulling the auricle backward and upward
b. Warming the solution to room temperature
c. Pacing the tip of the dropper on the edge of ear canal
d. Placing client in side lying position

47. Nurse Bea should instruct the male client with an ileostomy to report immediately which of the following symptom?

a. Absence of drainage from the ileostomy for 6 or more hours
b. Passage of liquid stool in the stoma
c. Occasional presence of undigested food
d. A temperature of 37.6 °C

48. Jerry has diagnosed with appendicitis. He develops a fever, hypotension and tachycardia. The nurse suspects which of the following complications?

a. Intestinal obstruction
b. Peritonitis
c. Bowel ischemia
d. Deficient fluid volume

49. Which of the following complications should the nurse carefully monitors a client with acute pancreatitis.

a. Myocardial Infarction
b. Cirrhosis
c. Peptic ulcer
d. Pneumonia
50. Which of the following symptoms during the icteric phase of viral hepatitis should the nurse expect the client to inhibit?

a. Watery stool
b. Yellow sclera
c. Tarry stool
d. Shortness of breath

1. **B.** Left sided heart failure causes fluid accumulation in the capillary network of the lung. Fluid eventually enters alveolar spaces and causes crackling sounds at the end of inspiration.
2. **B.** Morphine is a central nervous system depressant used to relieve the pain associated with myocardial infarction, it also decreases apprehension and prevents cardiogenic shock.
3. **D.** Seeing yellow spots and colored vision are common symptoms of digitalis toxicity.
4. **C.** When diuretics are taken in the morning, client will void frequently during daytime and will not need to void frequently at night.
5. **B.** The primary goal of therapy for the client with pulmonary edema or heart failure is increasing cardiac output. Pulmonary edema is an acute medical emergency requiring immediate intervention.
6. **C.** Decerebrate posturing is the extension of the extremities after a stimulus which may occur with upper brain stem injury.
7. **C.** The most frequent side effects of Cascara Sagrada (Laxative) is abdominal cramps and nausea.
8. **D.** Administration of Intravenous Nitroglycerin infusion requires pump for accurate control of medication.
9. **A.** By the 2nd day of hospitalization after suffering a Myocardial Infarction, Clients are able to perform care without chest pain.
10. **B.** The left side of the body will be affected in a right-sided brain attack.
11. **A.** After nephrectomy, it is necessary to measure urine output hourly. This is done to assess the effectiveness of the remaining kidney also to detect renal failure early.
12. **B.** The lumen of the arteries can be assessed by cardiac catheterization. Angina is usually caused by narrowing of the coronary arteries.
13. **C.** Blood pressure is monitored to detect hypotension which may indicate shock or hemorrhage. Apical pulse is taken to detect dysrhythmias related to cardiac irritability.
14. **A.** Protamine Sulfate is used to prevent continuous bleeding in client who has undergone open heart surgery.
15. **C.** The use of electronic toothbrush, irrigation device or dental floss may cause bleeding of gums, allowing bacteria to enter and increasing the risk of endocarditis.
16. **B.** Weight gain due to retention of fluids and worsening heart failure causes exertional dyspnea in clients with mitral regurgitation.

17. **D.** Discomfort or pain is a problem that originates in the kidney. It is felt at the costovertebral angle on the affected side.

18. **A.** Perfusion can be best estimated by blood pressure, which is an indirect reflection of the adequacy of cardiac output.

19. **C.** Myoclonic seizure is characterized by sudden uncontrollable jerking movements of a single or multiple muscle group.

20. **D.** Nicotine (Nicotrol) is given in controlled and decreasing doses for the management of nicotine withdrawal syndrome.

21. **D.** Raynaud’s disease is characterized by vasospasms of the small cutaneous arteries that involves fingers and toes.

22. **A.** Urine testing provides an indirect measure that maybe influenced by kidney function while blood glucose testing is a more direct and accurate measure.

23. **C.** One liter of fluid approximately weighs 2.2 pounds. A 4.5 pound weight loss equals to approximately 2L.

24. **A.** Osmosis is the movement of fluid from an area of lesser solute concentration to an area of greater solute concentration.

25. **D.** Forearm muscle weakness is a probable sign of radial nerve injury caused by crutch pressure on the axillae.

26. **B.** Neutropenic client is at risk for infection especially bacterial infection of the gastrointestinal and respiratory tract.

27. **C.** Semi-fowlers position will localize the spilled stomach contents in the lower part of the abdominal cavity.

28. **C.** Positioning the client laterally with the neck extended does not obstruct the airway so that drainage of secretions and oxygen and carbon dioxide exchange can occur.

29. **B.** Excessive bubbling indicates an air leak which must be eliminated to permit lung expansion.

30. **C.** Wheat cereal has a low sodium content.

31. **A.** Enlarged cirrhotic liver impinges the portal system causing increased hydrostatic pressure resulting to ascites.

32. **C.** Assessing for an open airway is the priority. The procedure involves the neck, the anesthesia may have affected the swallowing reflex or the inflammation may have closed in on the airway leading to ineffective air exchange.

33. **A.** Typical signs and symptoms of hypovolemic shock includes systolic blood pressure of less than 90 mm Hg.

34. **D.** Aspirin containing medications should not be taken 14 days before surgery to decrease the risk of bleeding.

35. **A.** Metabolic acidosis is anaerobic metabolism caused by lack of ability of the body to use circulating glucose. Administration of insulin corrects this problem.

36. **D.** Beta-carotene and Vitamin E are antioxidants which help to inhibit oxidation. Vitamin E is found in the following foods: wheat germ, corn, nuts, seeds, olives, spinach, asparagus and other green leafy vegetables. Food sources of beta-carotene include dark green vegetables, carrots, mangoes and tomatoes.

37. **A.** Gravity speeds up digestion and prevents reflux of stomach contents into the esophagus.
38. **B.** Abdominal distension may be associated with pain, may indicate perforation, a complication that could lead to peritonitis.

39. **D.** It may take 4 to 6 months to eat anything, but most people can eat anything they want.

40. **D.** Clay colored stools are indicative of hepatic obstruction

41. **D.** Streptomycin is an aminoglycoside and damage on the 8th cranial nerve (ototoxicity) is a common side effect of aminoglycosides.

42. **D.** Most peptic ulcer is caused by Helicobacter pylori which is a gram negative bacterium.

43. **D.** 12 to 24 hours after subtotal gastrectomy gastric drainage is normally brown, which indicates digested food.

44. **C.** Watching TV is permissible because the eye does not need to move rapidly with this activity, and it does not increase intraocular pressure.

45. **A.** Common signs and symptoms of fracture include pain, deformity, shortening of the extremity, crepitus and swelling.

46. **C.** The dropper should not touch any object or any part of the client’s ear.

47. **A.** Sudden decrease in drainage or onset of severe abdominal pain should be reported immediately to the physician because it could mean that obstruction has been developed.

48. **B.** Complications of acute appendicitis are peritonitis, perforation and abscess development.

49. **D.** A client with acute pancreatitis is prone to complications associated with respiratory system.

50. **B.** Liver inflammation and obstruction block the normal flow of bile. Excess bilirubin turns the skin and sclera yellow and the urine dark and frothy.
1. Marco who was diagnosed with brain tumor was scheduled for craniotomy. In preventing the development of cerebral edema after surgery, the nurse should expect the use of:

a. Diuretics
b. Antihypertensive
c. Steroids
d. Anticonvulsants

51. 2. Halfway through the administration of blood, the female client complains of lumbar pain. After stopping the infusion Nurse Hazel should:
52. a. Increase the flow of normal saline
53. b. Assess the pain further
54. c. Notify the blood bank
55. d. Obtain vital signs.

56. 3. Nurse Maureen knows that the positive diagnosis for HIV infection is made based on which of the following:
57. a. A history of high risk sexual behaviors.
58. b. Positive ELISA and western blot tests
59. c. Identification of an associated opportunistic infection
60. d. Evidence of extreme weight loss and high fever

61. 4. Nurse Maureen is aware that a client who has been diagnosed with chronic renal failure recognizes an adequate amount of high-biologic-value protein when the food the client selected from the menu was:
62. a. Raw carrots
63. b. Apple juice
64. c. Whole wheat bread
65. d. Cottage cheese

66. 5. Kenneth who has diagnosed with uremic syndrome has the potential to develop complications. Which among the following complications should the nurse anticipates:
67. a. Flapping hand tremors
68. b. An elevated hematocrit level
69. c. Hypotension
70. d. Hypokalemia

71. 6. A client is admitted to the hospital with benign prostatic hyperplasia, the nurse most relevant assessment would be:
72. a. Flank pain radiating in the groin
73. b. Distention of the lower abdomen
74. c. Perineal edema
75. d. Urethral discharge
76. 7. A client has undergone with penile implant. After 24 hrs of surgery, the client’s scrotum was edematous and painful. The nurse should:
77. a. Assist the client with sitz bath
78. b. Apply war soaks in the scrotum
79. c. Elevate the scrotum using a soft support
80. d. Prepare for a possible incision and drainage.
81. 8. Nurse Hazel receives emergency laboratory results for a client with chest pain and immediately informs the physician. An increased myoglobin level suggests which of the following?
82. a. Liver disease
83. b. Myocardial damage
84. c. Hypertension
85. d. Cancer
86. 9. Nurse Maureen would expect the a client with mitral stenosis would demonstrate symptoms associated with congestion in the:
87. a. Right atrium
88. b. Superior vena cava
89. c. Aorta
90. d. Pulmonary
91. 10. A client has been diagnosed with hypertension. The nurse priority nursing diagnosis would be:
92. a. Ineffective health maintenance
93. b. Impaired skin integrity
94. c. Deficient fluid volume
95. d. Pain
96. 11. Nurse Hazel teaches the client with angina about common expected side effects of nitroglycerin including:
97. a. high blood pressure
98. b. stomach cramps
99. c. headache
100. d. shortness of breath
101. 12. The following are lipid abnormalities. Which of the following is a risk factor for the development of atherosclerosis and PVD?
102. a. High levels of low density lipid (LDL) cholesterol
103. b. High levels of high density lipid (HDL) cholesterol
104. c. Low concentration triglycerides
105. d. Low levels of LDL cholesterol.
106. 13. Which of the following represents a significant risk immediately after surgery for repair of aortic aneurysm?
107. a. Potential wound infection
108. b. Potential ineffective coping
109. c. Potential electrolyte balance
110. d. Potential alteration in renal perfusion
111. Nurse Josie should instruct the client to eat which of the following foods to obtain the best supply of Vitamin B12?
   a. dairy products
   b. vegetables
   c. Grains
   d. Broccoli

115. Karen has been diagnosed with aplastic anemia. The nurse monitors for changes in which of the following physiologic functions?
   a. Bowel function
   b. Peripheral sensation
   c. Bleeding tendencies
   d. Intake and output

116. Lydia is scheduled for elective splenectomy. Before the client goes to surgery, the nurse in charge final assessment would be:
   a. signed consent
   b. vital signs
   c. name band
   d. empty bladder

117. What is the peak age range in acquiring acute lymphocytic leukemia (ALL)?
   a. 4 to 12 years.
   b. 20 to 30 years
   c. 40 to 50 years
   d. 60 60 70 years

118. Marie with acute lymphocytic leukemia suffers from nausea and headache. These clinical manifestations may indicate all of the following except
   a. effects of radiation
   b. chemotherapy side effects
   c. meningeal irritation
   d. gastric distension

119. A client has been diagnosed with Disseminated Intravascular Coagulation (DIC). Which of the following is contraindicated with the client?
   a. Administering Heparin
   b. Administering Coumadin
   c. Treating the underlying cause
   d. Replacing depleted blood products

120. Which of the following findings is the best indication that fluid replacement for the client with hypovolemic shock is adequate?
   a. Urine output greater than 30ml/hr
   b. Respiratory rate of 21 breaths/minute
   c. Diastolic blood pressure greater than 90 mmhg
   d. Systolic blood pressure greater than 110 mmhg

121. Which of the following signs and symptoms would Nurse Maureen include in teaching plan as an early manifestation of laryngeal cancer?
   a. Stomatitis
   b. Airway obstruction
   c. Hoarseness
d. Dysphagia

22. Karina a client with myasthenia gravis is to receive immunosuppressive therapy. The nurse understands that this therapy is effective because it:
   a. Promotes the removal of antibodies that impair the transmission of impulses
   b. Stimulates the production of acetylcholine at the neuromuscular junction.
   c. Decreases the production of autoantibodies that attack the acetylcholine receptors.
   d. Inhibits the breakdown of acetylcholine at the neuromuscular junction.

23. A female client is receiving IV Mannitol. An assessment specific to safe administration of the said drug is:
   a. Vital signs q4h
   b. Weighing daily
   c. Urine output hourly
   d. Level of consciousness q4h

24. Patricia a 20 year old college student with diabetes mellitus requests additional information about the advantages of using a pen like insulin delivery devices. The nurse explains that the advantages of these devices over syringes includes:
   a. Accurate dose delivery
   b. Shorter injection time
   c. Lower cost with reusable insulin cartridges
   d. Use of smaller gauge needle.

25. A male client’s left tibia was fractured in an automobile accident, and a cast is applied. To assess for damage to major blood vessels from the fracture tibia, the nurse in charge should monitor the client for:
   a. Swelling of the left thigh
   b. Increased skin temperature of the foot
   c. Prolonged reperfusion of the toes after blanching
   d. Increased blood pressure

26. After a long leg cast is removed, the male client should:
   a. Cleanse the leg by scrubbing with a brisk motion
   b. Put leg through full range of motion twice daily
   c. Report any discomfort or stiffness to the physician
   d. Elevate the leg when sitting for long periods of time.

27. While performing a physical assessment of a male client with gout of the great toe, Nurse Vivian should assess for additional tophi (urate deposits) on the:
   a. Buttocks
   b. Ears
   c. Face
   d. Abdomen

28. Nurse Katrina would recognize that the demonstration of crutch walking with tripod gait was understood when the client places weight on the:
   a. Palms of the hands and axillary regions
   b. Palms of the hand
   c. Axillary regions
   d. Feet, which are set apart
29. Mang Jose with rheumatoid arthritis states, “the only time I am without pain is when I lie in bed perfectly still”. During the convalescent stage, the nurse in charge with Mang Jose should encourage:

a. Active joint flexion and extension  
b. Continued immobility until pain subsides  
c. Range of motion exercises twice daily  
d. Flexion exercises three times daily

30. A male client has undergone spinal surgery, the nurse should:

a. Observe the client’s bowel movement and voiding patterns  
b. Log-roll the client to prone position  
c. Assess the client’s feet for sensation and circulation  
d. Encourage client to drink plenty of fluids

31. Marina with acute renal failure moves into the diuretic phase after one week of therapy. During this phase the client must be assessed for signs of developing:

a. Hypovolemia  
b. Renal failure  
c. Metabolic acidosis  
d. Hyperkalemia

32. Nurse Judith obtains a specimen of clear nasal drainage from a client with a head injury. Which of the following tests differentiates mucus from cerebrospinal fluid (CSF)?

a. Protein  
b. Specific gravity  
c. Glucose  
d. Microorganism

33. A 22 year old client suffered from his first tonic-clonic seizure. Upon awakening the client asks the nurse, “What caused me to have a seizure? Which of the following would the nurse include in the primary cause of tonic clonic seizures in adults more the 20 years?

a. Electrolyte imbalance  
b. Head trauma  
c. Epilepsy  
d. Congenital defect

34. What is the priority nursing assessment in the first 24 hours after admission of the client with thrombotic CVA?

a. Pupil size and papillary response  
b. Cholesterol level  
c. Echocardiogram  
d. Bowel sounds

35. Nurse Linda is preparing a client with multiple sclerosis for discharge from the hospital to home. Which of the following instruction is most appropriate?

a. “Practice using the mechanical aids that you will need when future disabilities arise”  
b. “Follow good health habits to change the course of the disease”.  
c. “Keep active, use stress reduction strategies, and avoid fatigue.  
d. “You will need to accept the necessity for a quiet and inactive lifestyle”.
221. The nurse is aware the early indicator of hypoxia in the unconscious client is:
   a. Cyanosis
   b. Increased respirations
   c. Hypertension
   d. Restlessness
222. A client is experiencing spinal shock. Nurse Myrna should expect the function of the bladder to be which of the following?
   a. Normal
   b. Atonic
   c. Spastic
   d. Uncontrolled
223. Which of the following stage the carcinogen is irreversible?
   a. Progression stage
   b. Initiation stage
   c. Regression stage
   d. Promotion stage
224. Among the following components thorough pain assessment, which is the most significant?
   a. Effect
   b. Cause
   c. Causing factors
   d. Intensity
225. A 65 year old female is experiencing flare up of pruritus. Which of the client’s action could aggravate the cause of flare ups?
   a. Sleeping in cool and humidified environment
   b. Daily baths with fragrant soap
   c. Using clothes made from 100% cotton
   d. Increasing fluid intake
226. Atropine sulfate (Atropine) is contraindicated in all but one of the following client?
   a. A client with high blood
   b. A client with bowel obstruction
   c. A client with glaucoma
   d. A client with U.T.I
227. Among the following clients, which among them is high risk for potential hazards from the surgical experience?
   a. 67-year-old client
   b. 49-year-old client
   c. 33-year-old client
   d. 15-year-old client
228. Nurse Jon assesses vital signs on a client undergone epidural anesthesia. Which of the following would the nurse assess next?
   a. Headache
   b. Bladder distension
   c. Dizziness
   d. Ability to move legs
44. Nurse Katrina should anticipate that all of the following drugs may be used in the attempt to control the symptoms of Meniere’s disease except:
   a. Antiemetics
   b. Diuretics
   c. Antihistamines
   d. Glucocorticoids

45. Which of the following complications associated with tracheostomy tube?
   a. Increased cardiac output
   b. Acute respiratory distress syndrome (ARDS)
   c. Increased blood pressure
   d. Damage to laryngeal nerves

46. Nurse Faith should recognize that fluid shift in an client with burn injury results from increase in the:
   a. Total volume of circulating whole blood
   b. Total volume of intravascular plasma
   c. Permeability of capillary walls
   d. Permeability of kidney tubules

47. An 83-year-old woman has several ecchymotic areas on her right arm. The bruises are probably caused by:
   a. Increased capillary fragility and permeability
   b. Increased blood supply to the skin
   c. Self inflicted injury
   d. Elder abuse

48. Nurse Anna is aware that early adaptation of client with renal carcinoma is:
   a. Nausea and vomiting
   b. Flank pain
   c. Weight gain
   d. Intermittent hematuria

49. A male client with tuberculosis asks Nurse Brian how long the chemotherapy must be continued. Nurse Brian’s accurate reply would be:
   a. 1 to 3 weeks
   b. 6 to 12 months
   c. 3 to 5 months
   d. 3 years and more

50. A client has undergone laryngectomy. The immediate nursing priority would be:
   a. Keep trachea free of secretions
   b. Monitor for signs of infection
   c. Provide emotional support
   d. Promote means of communication

Glucocorticoids (steroids) are used for their anti-inflammatory action, which decreases the development of edema.

The blood must be stopped at once, and then normal saline should be infused to keep the line patent and maintain blood volume.

These tests confirm the presence of HIV antibodies that occur in response to the presence of the human immunodeficiency virus (HIV).
299. 4. **D.** One cup of cottage cheese contains approximately 225 calories, 27 g of protein, 9 g of fat, 30 mg cholesterol, and 6 g of carbohydrate. Proteins of high biologic value (HBV) contain optimal levels of amino acids essential for life.

300. 5. **A.** Elevation of uremic waste products causes irritation of the nerves, resulting in flapping hand tremors.

301. 6. **B.** This indicates that the bladder is distended with urine, therefore palpable.

302. 7. **C.** Elevation increases lymphatic drainage, reducing edema and pain.

303. 8. **B.** Detection of myoglobin is a diagnostic tool to determine whether myocardial damage has occurred.

304. 9. **D.** When mitral stenosis is present, the left atrium has difficulty emptying its contents into the left ventricle because there is no valve to prevent back ward flow into the pulmonary vein, the pulmonary circulation is under pressure.

305. 10. **A.** Managing hypertension is the priority for the client with hypertension. Clients with hypertension frequently do not experience pain, deficient volume, or impaired skin integrity. It is the asymptomatic nature of hypertension that makes it so difficult to treat.

306. 11. **C.** Because of its widespread vasodilating effects, nitroglycerin often produces side effects such as headache, hypotension and dizziness.

307. 12. **A.** An increased in LDL cholesterol concentration has been documented at risk factor for the development of atherosclerosis. LDL cholesterol is not broken down into the liver but is deposited into the wall of the blood vessels.

308. 13. **D.** There is a potential alteration in renal perfusion manifested by decreased urine output. The altered renal perfusion may be related to renal artery embolism, prolonged hypotension, or prolonged aortic cross-clamping during the surgery.

309. 14. **A.** Good source of vitamin B12 are dairy products and meats.

310. 15. **C.** Aplastic anemia decreases the bone marrow production of RBC’s, white blood cells, and platelets. The client is at risk for bruising and bleeding tendencies.

311. 16. **B.** An elective procedure is scheduled in advance so that all preparations can be completed ahead of time. The vital signs are the final check that must be completed before the client leaves the room so that continuity of care and assessment is provided for.

312. 17. **A.** The peak incidence of Acute Lymphocytic Leukemia (ALL) is 4 years of age. It is uncommon after 15 years of age.

313. 18. **D.** Acute Lymphocytic Leukemia (ALL) does not cause gastric distention. It does invade the central nervous system, and clients experience headaches and vomiting from meningeal irritation.

314. 19. **B.** Disseminated Intravascular Coagulation (DIC) has not been found to respond to oral anticoagulants such as Coumadin.

315. 20. **A.** Urine output provides the most sensitive indication of the client’s response to therapy for hypovolemic shock. Urine output should be consistently greater than 30 to 35 mL/hr.

316. 21. **C.** Early warning signs of laryngeal cancer can vary depending on tumor location. Hoarseness lasting 2 weeks should be evaluated because it is one of the most common warning signs.
317. 22. C. Steroids decrease the body’s immune response thus decreasing the production of antibodies that attack the acetylcholine receptors at the neuromuscular junction.

318. 23. C. The osmotic diuretic mannitol is contraindicated in the presence of inadequate renal function or heart failure because it increases the intravascular volume that must be filtered and excreted by the kidney.

319. 24. A. These devices are more accurate because they are easily to used and have improved adherence in insulin regimens by young people because the medication can be administered discreetly.

320. 25. C. Damage to blood vessels may decrease the circulatory perfusion of the toes, this would indicate the lack of blood supply to the extremity.

321. 26. D. Elevation will help control the edema that usually occurs.

322. 27. B. Uric acid has a low solubility, it tends to precipitate and form deposits at various sites where blood flow is least active, including cartilaginous tissue such as the ears.

323. 28. B. The palms should bear the client’s weight to avoid damage to the nerves in the axilla.

324. 29. A. Active exercises, alternating extension, flexion, abduction, and adduction, mobilize exudates in the joints relieves stiffness and pain.

325. 30. C. Alteration in sensation and circulation indicates damage to the spinal cord, if these occurs notify physician immediately.

326. 31. A. In the diuretic phase fluid retained during the oliguric phase is excreted and may reach 3 to 5 liters daily, hypovolemia may occur and fluids should be replaced.

327. 32. C. The constituents of CSF are similar to those of blood plasma. An examination for glucose content is done to determine whether a body fluid is a mucus or a CSF. A CSF normally contains glucose.

328. 33. B. Trauma is one of the primary cause of brain damage and seizure activity in adults. Other common causes of seizure activity in adults include neoplasms, withdrawal from drugs and alcohol, and vascular disease.

329. 34. A. It is crucial to monitor the pupil size and papillary response to indicate changes around the cranial nerves.

330. 35. C. The nurse most positive approach is to encourage the client with multiple sclerosis to stay active, use stress reduction techniques and avoid fatigue because it is important to support the immune system while remaining active.

331. 36. D. Restlessness is an early indicator of hypoxia. The nurse should suspect hypoxia in unconscious client who suddenly becomes restless.

332. 37. B. In spinal shock, the bladder becomes completely atonic and will continue to fill unless the client is catheterized.

333. 38. A. Progression stage is the change of tumor from the preneoplastic state or low degree of malignancy to a fast growing tumor that cannot be reversed.

334. 39. D. Intensity is the major indicative of severity of pain and it is important for the evaluation of the treatment.

335. 40. B. The use of fragrant soap is very drying to skin hence causing the pruritus.

336. 41. C. Atropine sulfate is contraindicated with glaucoma patients because it increases intraocular pressure.
A 67 year old client is greater risk because the older adult client is more likely to have a less-effective immune system.

The last area to return sensation is in the perineal area, and the nurse in charge should monitor the client for distended bladder.

Glucocorticoids play no significant role in disease treatment.

Tracheostomy tube has several potential complications including bleeding, infection and laryngeal nerve damage.

In burn, the capillaries and small vessels dilate, and cell damage cause the release of a histamine-like substance. The substance causes the capillary walls to become more permeable and significant quantities of fluid are lost.

Aging process involves increased capillary fragility and permeability. Older adults have a decreased amount of subcutaneous fat and cause an increased incidence of bruise like lesions caused by collection of extravascular blood in loosely structured dermis.

Intermittent pain is the classic sign of renal carcinoma. It is primarily due to capillary erosion by the cancerous growth.

Tubercle bacillus is a drug resistant organism and takes a long time to be eradicated. Usually a combination of three drugs is used for minimum of 6 months and at least six months beyond culture conversion.

Patent airway is the most priority; therefore removal of secretions is necessary.

1. A client is scheduled for insertion of an inferior vena cava (IVC) filter. Nurse Patricia consults the physician about withholding which regularly scheduled medication on the day before the surgery?

   a. Potassium Chloride
   b. Warfarin Sodium
   c. Furosemide
   d. Docusate

2. A nurse is planning to assess the corneal reflex on unconscious client. Which of the following is the safest stimulus to touch the client’s cornea?

   a. Cotton buds
   b. Sterile glove
   c. Sterile tongue depressor
3. A female client develops an infection at the catheter insertion site. The nurse in charge uses the term “iatrogenic” when describing the infection because it resulted from:

   a. Client’s developmental level
   b. Therapeutic procedure
   c. Poor hygiene
   d. Inadequate dietary patterns

4. Nurse Carol is assessing a client with Parkinson’s disease. The nurse recognizes bradykinesia when the client exhibits:

   a. Intentional tremor
   b. Paralysis of limbs
   c. Muscle spasm
   d. Lack of spontaneous movement

5. A client who suffered from automobile accident complains of seeing frequent flashes of light. The nurse should expect:

   a. Myopia
   b. Detached retina
   c. Glaucoma
   d. Scleroderma

6. Kate with severe head injury is being monitored by the nurse for increasing intracranial pressure (ICP). Which finding should be most indicative sign of increasing intracranial pressure?

   a. Intermittent tachycardia
   b. Polydipsia
   c. Tachypnea
d. Increased restlessness

7. A hospitalized client had a tonic-clonic seizure while walking in the hall. During the seizure the nurse priority should be:
   a. Hold the client’s arms and leg firmly
   b. Place the client immediately to soft surface
   c. Protects the client’s head from injury
   d. Attempt to insert a tongue depressor between the client’s teeth

8. A client has undergone right pneumonectomy. When turning the client, the nurse should plan to position the client either:
   a. Right side-lying position or supine
   b. High fowlers
   c. Right or left side lying position
   d. Low fowler’s position

9. Nurse Jenny should caution a female client who is sexually active in taking Isoniazid (INH) because the drug has which of the following side effects?
   a. Prevents ovulation
   b. Has a mutagenic effect on ova
   c. Decreases the effectiveness of oral contraceptives
   d. Increases the risk of vaginal infection

10. A client has undergone gastrectomy. Nurse Jovy is aware that the best position for the client is:
    a. Left side lying
    b. Low fowler’s
    c. Prone
    d. Supine
11. During the initial postoperative period of the client’s stoma. The nurse evaluates which of the following observations should be reported immediately to the physician?
   a. Stoma is dark red to purple
   b. Stoma is oozes a small amount of blood
   c. Stoma is lightly edematous
   d. Stoma does not expel stool

12. Kate which has diagnosed with ulcerative colitis is following physician’s order for bed rest with bathroom privileges. What is the rationale for this activity restriction?
   a. Prevent injury
   b. Promote rest and comfort
   c. Reduce intestinal peristalsis
   d. Conserve energy

13. Nurse KC should regularly assess the client’s ability to metabolize the total parenteral nutrition (TPN) solution adequately by monitoring the client for which of the following signs:
   a. Hyperglycemia
   b. Hypoglycemia
   c. Hypertension
   d. Elevate blood urea nitrogen concentration

14. A female client has an acute pancreatitis. Which of the following signs and symptoms the nurse would expect to see?
   a. Constipation
   b. Hypertension
   c. Ascites
   d. Jaundice

15. A client is suspected to develop tetany after a subtotal thyroidectomy. Which of the
following symptoms might indicate tetany?

a. Tingling in the fingers
b. Pain in hands and feet
c. Tension on the suture lines
d. Bleeding on the back of the dressing

16. A 58 year old woman has newly diagnosed with hypothyroidism. The nurse is aware that the signs and symptoms of hypothyroidism include:

a. Diarrhea
b. Vomiting
c. Tachycardia
d. Weight gain

17. A client has undergone for an ileal conduit, the nurse in charge should closely monitor the client for occurrence of which of the following complications related to pelvic surgery?

a. Ascites
b. Thrombophlebitis
c. Inguinal hernia
d. Peritonitis

18. Dr. Marquez is about to defibrillate a client in ventricular fibrillation and says in a loud voice “clear”. What should be the action of the nurse?

a. Places conductive gel pads for defibrillation on the client’s chest
b. Turn off the mechanical ventilator
c. Shuts off the client’s IV infusion
d. Steps away from the bed and make sure all others have done the same

19. A client has been diagnosed with glomerulonephritis complains of thirst. The nurse should offer:
a. Juice  
b. Ginger ale  
c. Milk shake  
d. Hard candy

20. A client with acute renal failure is aware that the most serious complication of this condition is:
   a. Constipation  
   b. Anemia  
   c. Infection  
   d. Platelet dysfunction

21. Nurse Karen is caring for clients in the OR. The nurse is aware that the last physiologic function that the client loss during the induction of anesthesia is:
   a. Consciousness  
   b. Gag reflex  
   c. Respiratory movement  
   d. Corneal reflex

22. The nurse is assessing a client with pleural effusion. The nurse expect to find:
   a. Deviation of the trachea towards the involved side  
   b. Reduced or absent of breath sounds at the base of the lung  
   c. Moist crackles at the posterior of the lungs  
   d. Increased resonance with percussion of the involved area

23. A client admitted with newly diagnosed with Hodgkin’s disease. Which of the following would the nurse expect the client to report?
   a. Lymph node pain
b. Weight gain

c. Night sweats

d. Headache

24. A client has suffered from fall and sustained a leg injury. Which appropriate question would the nurse ask the client to help determine if the injury caused fracture?

   a. “Is the pain sharp and continuous?”
   
   b. “Is the pain dull ache?”
   
   c. “Does the discomfort feel like a cramp?”
   
   d. “Does the pain feel like the muscle was stretched?”

25. The Nurse is assessing the client’s casted extremity for signs of infection. Which of the following findings is indicative of infection?

   a. Edema
   
   b. Weak distal pulse
   
   c. Coolness of the skin
   
   d. Presence of “hot spot” on the cast

26. Nurse Rhia is performing an otoscopic examination on a female client with a suspected diagnosis of mastoiditis. Nurse Rhia would expect to note which of the following if this disorder is present?

   a. Transparent tympanic membrane
   
   b. Thick and immobile tympanic membrane
   
   c. Pearly colored tympanic membrane
   
   d. Mobile tympanic membrane

27. Nurse Jocelyn is caring for a client with nasogastric tube that is attached to low suction. Nurse Jocelyn assesses the client for symptoms of which acid-base disorder?

   a. Respiratory alkalosis
28. A male adult client has undergone a lumbar puncture to obtain cerebrospinal fluid (CSF) for analysis. Which of the following values should be negative if the CSF is normal?

   a. Red blood cells
   b. White blood cells
   c. Insulin
   d. Protein

29. A client is suspected of developing diabetes insipidus. Which of the following is the most effective assessment?

   a. Taking vital signs every 4 hours
   b. Monitoring blood glucose
   c. Assessing ABG values every other day
   d. Measuring urine output hourly

30. A 58 year old client is suffering from acute phase of rheumatoid arthritis. Which of the following would the nurse in charge identify as the lowest priority of the plan of care?

   a. Prevent joint deformity
   b. Maintaining usual ways of accomplishing task
   c. Relieving pain
   d. Preserving joint function

31. Among the following, which client is autotransfusion possible?

   a. Client with AIDS
   b. Client with ruptured bowel
c. Client who is in danger of cardiac arrest
d. Client with wound infection

32. Which of the following is not a sign of thromboembolism?
   a. Edema
   b. Swelling
   c. Redness
   d. Coolness

33. Nurse Becky is caring for client who begins to experience seizure while in bed. Which action should the nurse implement to prevent aspiration?
   a. Position the client on the side with head flexed forward
   b. Elevate the head
   c. Use tongue depressor between teeth
   d. Loosen restrictive clothing

34. A client has undergone bone biopsy. Which nursing action should the nurse provide after the procedure?
   a. Administer analgesics via IM
   b. Monitor vital signs
   c. Monitor the site for bleeding, swelling and hematoma formation
   d. Keep area in neutral position

35. A client is suffering from low back pain. Which of the following exercises will strengthen the lower back muscle of the client?
   a. Tennis
   b. Basketball
   c. Diving
36. A client with peptic ulcer is being assessed by the nurse for gastrointestinal perforation. The nurse should monitor for:

a. (+) guaiac stool test
b. Slow, strong pulse
c. Sudden, severe abdominal pain
d. Increased bowel sounds

37. A client has undergone surgery for retinal detachment. Which of the following goal should be prioritized?

a. Prevent an increase intraocular pressure
b. Alleviate pain
c. Maintain darkened room
d. Promote low-sodium diet

38. A Client with glaucoma has been prescribed with miotics. The nurse is aware that miotics is for:

a. Constricting pupil
b. Relaxing ciliary muscle
c. Constricting intraocular vessel
d. Paralyzing ciliary muscle

39. When suctioning an unconscious client, which nursing intervention should the nurse prioritize in maintaining cerebral perfusion?

a. Administer diuretics
b. Administer analgesics
c. Provide hygiene
d. Hypoxygenate before and after suctioning
40. When discussing breathing exercises with a postoperative client, Nurse Hazel should include which of the following teaching?

   a. Short frequent breaths
   b. Exhale with mouth open
   c. Exercise twice a day
   d. Place hand on the abdomen and feel it rise

41. Louie, with burns over 35% of the body, complains of chilling. In promoting the client’s comfort, the nurse should:

   a. Maintain room humidity below 40%
   b. Place top sheet on the client
   c. Limit the occurrence of drafts
   d. Keep room temperature at 80 degrees

42. Nurse Trish is aware that temporary heterograft (pig skin) is used to treat burns because this graft will:

   a. Relieve pain and promote rapid epithelialization
   b. Be sutured in place for better adherence
   c. Debride necrotic epithelium
   d. Concurrently used with topical antimicrobials

43. Mark has multiple abrasions and a laceration to the trunk and all four extremities says, “I can’t eat all this food”. The food that the nurse should suggest to be eaten first should be:

   a. Meat loaf and coffee
   b. Meat loaf and strawberries
   c. Tomato soup and apple pie
   d. Tomato soup and buttered bread

44. Tony returns from surgery with permanent colostomy. During the first 24 hours the
colostomy does not drain. The nurse should be aware that:

a. Proper functioning of nasogastric suction
b. Presurgical decrease in fluid intake
c. Absence of gastrointestinal motility
d. Intestinal edema following surgery

45. When teaching a client about the signs of colorectal cancer, Nurse Trish stresses that the most common complaint of persons with colorectal cancer is:

a. Abdominal pain
b. Hemorrhoids
c. Change in caliber of stools
d. Change in bowel habits

46. Louis develops peritonitis and sepsis after surgical repair of ruptures diverticulum. The nurse in charge should expect an assessment of the client to reveal:

a. Tachycardia
b. Abdominal rigidity
c. Bradycardia
d. Increased bowel sounds

47. Immediately after liver biopsy, the client is placed on the right side, the nurse is aware that that this position should be maintained because it will:

a. Help stop bleeding if any occurs
b. Reduce the fluid trapped in the biliary ducts
c. Position with greatest comfort
d. Promote circulating blood volume

48. Tony has diagnosed with hepatitis A. The information from the health history that is most likely linked to hepatitis A is:
a. Exposed with arsenic compounds at work  
b. Working as local plumber  
c. Working at hemodialysis clinic  
d. Dish washer in restaurants  

49. Nurse Trish is aware that the laboratory test result that most likely would indicate acute pancreatitis is an elevated:  

a. Serum bilirubin level  
b. Serum amylase level  
c. Potassium level  
d. Sodium level  

50. Dr. Marquez orders serum electrolytes. To determine the effect of persistent vomiting, Nurse Trish should be most concerned with monitoring the:  

a. Chloride and sodium levels  
b. Phosphate and calcium levels  
c. Protein and magnesium levels  
d. Sulfate and bicarbonate levels  

1. B. In preoperative period, the nurse should consult with the physician about withholding Warfarin Sodium to avoid occurrence of hemorrhage.  

2. D. A client who is unconscious is at greater risk for corneal abrasion. For this reason, the safest way to test the corneal reflex is by touching the cornea lightly with a wisp of cotton.  

3. B. Iatrogenic infection is caused by the heath care provider or is induced inadvertently by medical treatment or procedures.  

4. D. Bradykinesia is slowing down from the initiation and execution of movement.  

5. B. This symptom is caused by stimulation of retinal cells by ocular movement.  

6. D. Restlessness indicates a lack of oxygen to the brain stem which impairs the reticular activating system.
7. **C.** Rhythmic contraction and relaxation associated with tonic-clonic seizure can cause repeated banging of head.

8. **A.** Right side lying position or supine position permits ventilation of the remaining lung and prevent fluid from draining into sutured bronchial stump.

9. **C.** Isoniazid (INH) interferes in the effectiveness of oral contraceptives and clients of childbearing age should be counseled to use an alternative form of birth control while taking this drug.

10. **B.** A client who has had abdominal surgery is best placed in a low fowler’s position. This relaxes abdominal muscles and provides maximum respiratory and cardiovascular function.

11. **A.** Dark red to purple stoma indicates inadequate blood supply.

12. **C.** The rationale for activity restriction is to help reduce the hypermotility of the colon.

13. **A.** During Total Parenteral Nutrition (TPN) administration, the client should be monitored regularly for hyperglycemia.

14. **D.** Jaundice may be present in acute pancreatitis owing to obstruction of the biliary duct.

15. **A.** Tetany may occur after thyroidectomy if the parathyroid glands are accidentally injured or removed.

16. **D.** Typical signs of hypothyroidism includes weight gain, fatigue, decreased energy, apathy, brittle nails, dry skin, cold intolerance, constipation and numbness.

17. **B.** After a pelvic surgery, there is an increased chance of thrombophlebitis owing to the pelvic manipulation that can interfere with circulation and promote venous stasis.

18. **D.** For the safety of all personnel, if the defibrillator paddles are being discharged, all personnel must stand back and be clear of all the contact with the client or the client’s bed.

19. **D.** Hard candy will relieve thirst and increase carbohydrates but does not supply extra fluid.

20. **C.** Infection is responsible for one third of the traumatic or surgically induced death of clients with renal failure as well as medical induced acute renal failure (ARF).

21. **C.** There is no respiratory movement in stage 4 of anesthesia, prior to this stage, respiration is depressed but present.

22. **B.** Compression of the lung by fluid that accumulates at the base of the lungs reduces expansion and air exchange.
23. C. Assessment of a client with Hodgkin’s disease most often reveals enlarged, painless lymph node, fever, malaise and night sweats.

24. A. Fractured pain is generally described as sharp, continuous, and increasing in frequency.

25. D. Signs and symptoms of infection under a casted area include odor or purulent drainage and the presence of “hot spot” which are areas on the cast that are warmer than the others.

26. B. Otoscopic examination in a client with mastoiditis reveals a dull, red, thick and immobile tympanic membrane with or without perforation.

27. D. Loss of gastric fluid via nasogastric suction or vomiting causes metabolic alkalosis because of the loss of hydrochloric acid which is a potent acid in the body.

28. A. The adult with normal cerebrospinal fluid has no red blood cells.

29. D. Measuring the urine output to detect excess amount and checking the specific gravity of urine samples to determine urine concentration are appropriate measures to determine the onset of diabetes insipidus.

30. B. The nurse should focus more on developing less stressful ways of accomplishing routine task.

31. C. Autotransfusion is acceptable for the client who is in danger of cardiac arrest.

32. D. The client with thromboembolism does not have coolness.

33. A. Positioning the client on one side with head flexed forward allows the tongue to fall forward and facilitates drainage secretions therefore prevents aspiration.

34. C. Nursing care after bone biopsy includes close monitoring of the punctured site for bleeding, swelling and hematoma formation.

35. D. Walking and swimming are very helpful in strengthening back muscles for the client suffering from lower back pain.

36. C. Sudden, severe abdominal pain is the most indicative sign of perforation. When perforation of an ulcer occurs, the nurse maybe unable to hear bowel sounds at all.

37. A. After surgery to correct a detached retina, prevention of increased intraocular pressure is the priority goal.

38. A. Miotic agent constricts the pupil and contracts ciliary muscle. These effects widen the filtration angle and permit increased out flow of aqueous humor.
39. **D.** It is a priority to hyperoxygenate the client before and after suctioning to prevent hypoxia and to maintain cerebral perfusion.

40. **D.** Abdominal breathing improves lungs expansion.

41. **C.** A Client with burns is very sensitive to temperature changes because heat is loss in the burn areas.

42. **A.** The graft covers the nerve endings, which reduces pain and provides framework for granulation.

43. **B.** Meat provides proteins and the fruit proteins vitamin C that both promote wound healing.

44. **C.** This is primarily caused by the trauma of intestinal manipulation and the depressive effects anesthetics and analgesics.

45. **D.** Constipation, diarrhea, and/or constipation alternating with diarrhea are the most common symptoms of colorectal cancer.

46. **B.** With increased intraabdominal pressure, the abdominal wall will become tender and rigid.

47. **A.** Pressure applied in the puncture site indicates that a biliary vessel was puncture which is a common complication after liver biopsy.

48. **B.** Hepatitis A is primarily spread via fecal-oral route. Sewage polluted water may harbor the virus.

49. **B.** Amylase concentration is high in the pancreas and is elevated in the serum when the pancreas becomes acutely inflamed and also it distinguishes pancreatitis from other acute abdominal problems.

50. **A.** Sodium, which is concerned with the regulation of extracellular fluid volume, it is lost with vomiting. Chloride, which balances cations in the extracellular compartments, is also lost with vomiting, because sodium and chloride are parallel electrolytes, hyponatremia will accompany.

### Gastrointestinal Disorders

Situation 1: Children have a special fascination with the workings of the digestive system. To fully understand the digestive processes, Nurse Lavigna must be knowledgeable of the anatomy and physiology of the gastrointestinal system.

1. The alimentary canal is a continuous, coiled, hollow muscular tube that winds through the
ventral cavity and is open at both ends. Its solid organs include all of the following except:

a. liver  
b. gall bladder  
c. stomach  
d. pancreas  

2. Pharynx is lined with mucous membranes and mucous secreting glands to ease the passage of food. The laryngopharynx serves as passageway for:

a. air only  
b. air and water  
c. food, fluids and air  
d. air and food  

3. Once food has been placed in the mouth, both mechanical and chemical digestions begin. The six activities of the digestive process are:

a. ingestion, mastication, digestion, deglutition, absorption, egestion  
b. ingestion, mastication, deglutition, digestion, absorption, egestion  
c. deglutition, ingestion, mastication, egestion, absorption, defecation  
d. ingestion, digestion, mastication, deglutition, absorption, defecation  

4. Most digestive activity occurs in the pyloric region of the stomach. What hormone stimulates the chief cells to produce pepsinogen?

a. Gastrin  
b. Pepsin  
c. HCl  
d. Insulin  

5. What pancreatic enzyme aids in the digestion of carbohydrates?

a. Lipase  
b. Trypsin  
c. Amylase  
d. Chymotrypsin  

Situation 2: Nurse Dorina is going to perform an abdominal examination to Mr. Lim who was admitted due to on and off pain since yesterday.
6. How will you position Mr. Lim prior to procedure?
   a. supine with knees flexed
   b. prone
   c. lying on back
   d. sim’s

7. To identify any localized bulging, distention and peristaltic waves, Nurse Dorina must perform which of the following?
   a. Auscultation
   b. Inspection
   c. Palpation
   d. Percussion

8. In order to identify areas of tenderness and swelling, Nurse Dorina must do:
   a. deep palpation
   b. light palpation
   c. percussion
   d. palpation

9. Mr. Lim verbalized pain on the right iliac region. Nurse Dorina knows that the organ affected would be the:
   a. liver
   b. sigmoid colon
   c. appendix
   d. duodenum

10. Mr. Lim felt pain upon release of Nurse Dorina’s hand. This can be referred as:
    a. referred pain
    b. rebound tenderness
    c. direct tenderness
    d. indirect tenderness

Situation 3: Mrs. Cruz was admitted in the Medical Floor due to pyrosis, dyspepsia and difficulty of swallowing.

11. Based from the symptoms presented, Nurse Yoshi might suspect:
a. Esophagitis  
b. Hiatal hernia  
c. GERD  
d. Gastric Ulcer

12. What diagnostic test would confirm the type of problem Mrs. Cruz have?

a. barium enema  
b. barium swallow  
c. colonoscopy  
d. lower GI series

13. Mrs. Cruz complained of pain and difficulty in swallowing. This term is referred as:

a. Odynophagia  
b. Dysphagia  
c. Pyrosis  
d. Dyspepsia

14. To avoid acid reflux, Nurse Yoshi should advice Mrs. Cruz to avoid which type of diet?

a. cola, coffee and tea  
b. high fat, carbonated and caffeinated beverages  
c. beer and green tea  
d. lechon paksiw and bicol express

15. Mrs. Cruz’ body mass index (BMI) is 25. You can categorized her as:

a. normal  
b. overweight  
c. underweight  
d. obese

Situation 4: Nurse Gloria is the staff nurse assigned at the Emergency Department. During her shift, a patient was rushed – in the ED complaining of severe heartburn, vomiting and pain that radiates to the flank. The doctor suspects gastric ulcer.

16. What other symptoms will validate the diagnosis of gastric ulcer?

a. right epigastric pain  
b. pain occurs when stomach is empty  
c. pain occurs immediately after meal
d. pain not relieved by vomiting

17. What diagnostic test would yield good visualization of the ulcer crater?

a. Endoscopy
b. Gastroscopy
c. Barium Swallow
d. Histology

18. Peptic ulcer disease particularly gastric ulcer is thought to be cause by which of the following microorganisms?

a. E. coli
b. H. pylori
c. S. aureus
d. K. pneumoniae

19. She is for occult blood test, what specimen will you collect?

a. Blood
b. Urine
c. Stool
d. Gastric Juice

20. Preparation of the client for occult blood examination is:

a. Fluid intake limited only to 1 liter/day
b. NPO for 12 hours prior to obtaining of specimen
c. Increase fluid intake
d. Meatless diet for 48 hours prior to obtaining of specimen

Situation 5: IBD is a common inflammatory functional bowel disorder also known as spastic bowel, functional colitis and mucous colitis.

21. The client with IBS asks Nurse June what causes the disease. Which of the following responses by Nurse June would be most appropriate?

a. “This is an inflammation of the bowel caused by eating too much roughage”
b. “IBS is caused by a stressful lifestyle”
c. “The cause of this condition is unknown”
d. “There is thinning of the intestinal mucosa caused by ingestion of gluten”
22. Which of the following alimentary canal is the most common location for Chron’s disease?

a. Descending colon  
b. Jejunum  
c. Sigmoid Colon  
d. Terminal Ileum

23. Which of the following factors is believed to be linked to Chron’s disease?

a. Diet  
b. Constipation  
c. Heredity  
d. Lack of exercise

24. How about ulcerative colitis, which of the following factors is believed to cause it?

a. Acidic diet  
b. Altered immunity  
c. Chronic constipation  
d. Emotional stress

25. Mr. Jung, had ulcerative colitis for 5 years and was admitted to the hospital. Which of the following factors was most likely of greatest significance in causing an exacerbation of the disease?

a. A demanding and stressful job  
b. Changing to a modified vegetarian diet  
c. Beginning a weight training program  
d. Walking 2 miles everyday

Situation 6: A patient was admitted in the Medical Floor at St. Luke’s Hospital. He was asymptomatic. The doctor suspects diverticulosis.

26. Which of the following definitions best describes diverticulosis?

a. An inflamed outpouching of the intestine  
b. A non-inflamed outpouching of the intestine  
c. The partial impairment of the forward flow of instestinal contents  
d. An abnormal protrusions of an oxygen through the structure that usually holds it
27. Which of the following types of diet is implicated in the development of diverticulosis?

a. Low – fiber diet  
b. High – fiber diet  
c. High – protein diet  
d. Low – carbohydrate diet

28. Which of the following tests should be administered to client with diverticulosis?

a. Proctoscopy  
b. Barium enema  
c. Barium swallow  
d. Gastroscopy

29. To improve Mr. Trinidad’s condition, your best nursing intervention and teaching is:

a. Reduce fluid intake  
b. Increase fiber in the diet  
c. Administering of antibiotics  
d. Exercise to increase intraabdominal pressure

30. Upon review of Mr. Trinidad’s chart, Nurse Drew noticed that he weighs 121 lbs and his height is 5 ft, 4 in. After computing for his Body Mass Index (BMI), you can categorize him as:

a. obese  
b. normal  
c. obese  
d. underweight

Situation 7: Manny, 6 years old was admitted at Cardinal Santos Hospital due to increasing frequency of bowel movements, abdominal cramps and distension.

31. Diarrhea is said to be the leading cause of morbidity in the Philippines. Nurse Harry knows that diarrhea is present if:

a. passage of stool is more than 3 bowel movements per week  
b. passage of stool is less than 3 bowel movements per day  
c. passage of stool is more than 3 bowel movements per day  
d. passage of stool is less than 3 bowel movements per week

32. Diarrhea is believed to be caused by all of the following except
a. increase intestinal secretions
b. altered immunity
c. decrease mucosal absorption
d. altered motility

33. What life threatening condition may result in persistent diarrhea?

a. hypokalemia
b. dehydration
c. cardiac dysrhythmias
d. leukocytosis

34. Voluminous, watery stools can deplete fluids and electrolytes. The acid base imbalance that can occur is:

a. metabolic alkalosis
b. metabolic acidosis
c. respirator acidosis
d. respirator alkalosis

35. What is the immediate home care management for diarrhea?

a. Milk
b. Imodium
c. Water
d. Oresol

Situation 8: Mr. Sean is admitted to the hospital with a bowel obstruction. He complained of colicky pain and inability to pass stool.

36. Which of these findings by Nurse Leonard, would indicate that the obstruction is in the early stages?

a. high pitched tinkling or rumbling bowel sounds
b. hypoactive bowel sounds
c. no bowel sounds auscultated
d. normal bowel sounds heard in all four quadrants

37. Nasogastric tube was inserted to Mr. Sean. The NGT’s primary purpose is:

a. nutrition
b. decompression of bowel
38. Mr. Sean has undergone surgery. Post–operatively, which of the following findings is normal?

a. absent bowel sounds  
b. bleeding  
c. hemorrhage  
d. bowel movement  

39. Client education should be given in order to prevent constipation. Nurse Leonard’s health teaching should include which of the following?

a. use of natural laxatives  
b. fluid intake of 6 glasses per day  
c. use of OTC laxatives  
d. complete bed rest  

40. Four hours post–operatively, Mr. Sean complains of guarding and rigidity of the abdomen. Nurse Leonard’s initial intervention is:

a. assess for signs of peritonitis  
b. call the physician  
c. administer pain medication  
d. ignore the client  

Situation 9: Mr. Gerald Liu, 19 y/o, is being admitted to a hospital unit complaining of severe pain in the lower abdomen. Admission vital signs reveal an oral temperature of 101.2°F.

41. Which of the following would confirm a diagnosis of appendicitis?

a. The pain is localized at a position halfway between the umbilicus and the right iliac crest.  
b. Mr. Liu describes the pain as occurring 2 hours after eating  
c. The pain subsides after eating  
d. The pain is in the left lower quadrant  

42. Which of the following complications is thought to be the most common cause of appendicitis?

a. A fecalith  
b. Internal bowel occlusion  

c. Bowel kinking  
d. Abdominal wall swelling

43. The doctor ordered for a complete blood count. After the test, Nurse Ray received the result from the laboratory. Which laboratory values will confirm the diagnosis of appendicitis?

a. RBC 5.5 x 106/mm3  
b. Hct 44 %  
c. WBC 13,000/mm3  
d. Hgb 15 g/dL

44. Signs and symptoms include pain in the RLQ of the abdomen that may be localize at McBurney’s point. To relieve pain, Mr. Liu should assume which position?

a. Prone  
b. Supine, stretched out  
c. Sitting  
d. Lying with legs drawn up

45. After a few minutes, the pain suddenly stops without any intervention. Nurse Ray might suspect that:

a. the appendix is still distended  
b. the appendix may have ruptured  
c. an increased in intrathoracic pressure will occur  
d. signs and symptoms of peritonitis occur

Situation 10: Nurse Nico is caring to a 38-year-old female, G3P3 client who has been diagnosed with hemorrhoids.

46. Which of the following factors would most likely be a primary cause of her hemorrhoids?

a. Her age  
b. Three vaginal delivery pregnancies  
c. Her job as a school teacher  
d. Varicosities in the legs

47. Client education should include minimizing client discomfort due to hemorrhoids. Nursing management should include:

a. Suggest to eat low roughage diet
b. Advise to wear silk undergarments

c. Avoid straining during defecation

d. Use of sitz bath for 30 minutes

48. The doctor orders for Witch Hazel 5%. Nurse Nico knows that the action of this astringent is:

a. temporarily relieves pain, burning, and itching by numbing the nerve endings
b. causes coagulation (clumping) of proteins in the cells of the perianal skin or the lining of the anal canal
c. inhibits the growth of bacteria and other organisms
d. causes the outer layers of skin or other tissues to disintegrate

49. Which position would be ideal for the client in the early postoperative period after hemorrhoidectomy?

a. High Fowler’s
b. Supine
c. Side – lying
d. Trendelenburg’s

50. Nurse Nico instructs her client who has had a hemorrhoidectomy not to use a sitz bath until at least 12 hours postoperatively to avoid which of the following complications?

a. Hemorrhage
b. Rectal Spasm
c. Urinary retention

Answer: C. stomach
Rationale: Stomach is a hollow digestive organ in the GI tract. The liver, gall baldder and pancreas are all solid organs which are part of the hepato-biliary system. Test taking skills: which does not belong to the group?

2. Answer: D. air and food
Rationale: The laryngopharynx serves as passageway for air and food and so as with the oropharynx. Option a is nasopharynx. Answers b and c may be correct but air and food is more accuarte.

3. Answer: B. ingestion, mastication, deglutition, digestion, absorption, egestion
Rationale: The digestive processes involve six steps. Ingestion is taking in of food in the mouth; mastication is the mechanical process where food is converted into bolus; deglutition is the act of swallowing; digestion is the chemical breakdown of food into chime; absorption occurs in the small intestines (solutes) and large intestines (water) and egestion/defecation where elimination of feces occur.
4. **Answer: A. Gastrin**  
Rationale: Gastrin stimulates chief cells to produce pepsinogen when foods enter and suppression of pepsinogen when it leaves and enters the small intestines; it is the major hormone that regulates acid secretion in the stomach. Pepsin; a gastric protease secreted in an inactive form, pepsinogen, which is activated by stomach acid that acts to degrade protein. HCl is produced by the parietal cells. Insulin is a pancreatic hormone.

5. **Answer: C. Amylase**  
Rationale: Amylase aids in the digestion of carbohydrates. Trypsin/Chymotrypsin aids in the digestion of proteins. Lipase aids in the digestion of fats.

6. **Answers: A. supine with knees flexed**  
Rationale: During abdominal examination, positioning the client in supine with knees flexed will promote relaxation of abdominal muscles. Options b and d are inaccurate in this type of procedure. Lying on back or supine may be correct but option a is the best answer.

7. **Answer: B. Inspection**  
Rationale: Inspection is the first step in abdominal exam to note the contour and symmetry of abdomen as well as localized bulging, distention and peristaltic waves. Auscultation is done to determine the character, location and frequency of bowel sounds. Percussion is to assess tympany or dullness. Palpation is to asses areas of tenderness and discomfort. Note: In abdominal exam: Inspection, Auscultation, Percussion and Palpation are the correct order.

8. **Answer: B. Light palpation**  
Rationale: Light palpation is done to identify areas of tenderness and swelling. Deep palpation is done to identify masses in all four quadrants. Test taking skills: one of the opposite is the correct answer.

9. **Answer: C. Appendix**  
Rationale: Appendix and cecum is located in the right iliac region. Liver and gall bladder is at the right hypochondriac. Sigmoid colon is at the left iliac. Duodenum, stomach and pancreas is in the epigastric region.

10. **Answer: B. Rebound Tenderness**  
Rationale: Rebound tenderness is pain felt upon sudden release of the examiners hand which in most cases suggest peritonitis. Referred pain is pain felt in an area remote from the site of origin. Direct tenderness is localized pain upon palpation. Indirect tenderness is pain outside the area of palpation.

11. **Answer: C. Gastroesophageal Reflux Disease (GERD)**  
Rationale: GERD is the backflow of gastric or duodenal contents into the esophagus caused by incompetent lower esophageal sphincter. Pyrosis or heartburn, dyspepsia and dysphagia are cardinal symptoms.

12. **Answer: B. Barium swallow**  
Rationale: Barium swallow or upper GI series would confirm GERD. Endoscopy is another
diagnostic test. Options a and d are the same. Option c is incorrect.

13. **Answer: A. Odynophagia**  
Rationale: When difficulty of swallowing is accompanied with pain this is now referred as odynophagia. Dysphagia is difficulty of swallowing alone.

14. **Answer: B. High fat, carbonated and caffeinated beverages**  
Rationale: All are correct but option b is the best answer. In patients with GERD, this type of diet must be avoided to avoid backflow of gastric contents. Excessive caffeine reduces the tone of lower esophageal sphincter. Test Taking Skills: look for the umbrella effect

15. **Answer: B. Overweight**  
Rationale: Mr. Cruz’ BMI belongs to the overweight category (24 – 26), malnourished (less than 17), underweight (17 – 19), normal (20 – 23), obese (27 – 30) and morbidly obese (greater than 30). BMI is weight in kilograms divided by height in square meters.

16. **Answer: C. Pain occurs immediately after meal.**  
Rationale: In gastric ulcer food intake aggravates pain which usually occur ½ - 1 hour before meal or immediately during or after food intake. Options a, b, c suggests duodenal ulcer.

17. **Answer: A. Endoscopy**  
Rationale: Endoscopy determines bleeding, pain, difficulty swallowing, and a change in bowel habits. This would yield good visualization of the ulcer crater. Other options are also diagnostic tests in PUD.

18. **Answer: B. H. pylori**  
Rationale: Helicobacter pylori (H. pylori) is a bacteria responsible for most ulcers and many cases of chronic gastritis (inflammation of the stomach). This organism can weaken the protective coating of the stomach and duodenum (first part of the small intestines), allowing the damaging digestive juices to irritate the sensitive lining of these body parts.

19. **Answer: C. Stool**  
Rationale: Occult blood test or stool guiac test is a test that detects the presence of hidden (occult) blood in the stool (bowel movement). The stool guaiac is the most common form of fecal occult blood test (FOBT) in use today. So stool specimen will be collected.

20. **Answer: D. Meatless diet for 48 hours prior to obtaining of specimen**  
Rationale: Eating meat can cause false positive test result. Using proper stool collection technique, avoiding certain drugs, and observing dietary restrictions can minimize these measurement errors.

21. **Answer: C. “The cause of this condition is unknown”**  
Rationale: There is no known cause of IBS, and diagnosis is made by excluding all the other diseases that cause the symptoms. There is no inflammation if the bowel. Some factors
exacerbate the symptoms including anxiety, fear, stress, depression, some foods and drugs but there do not cause the disease.

22. **Answer: d. Terminal Ileum**
   Rationale: Chronic inflammatory of GI mucosa occurs anywhere from the mouth to anus but most often in terminal ileum. Inflammatory lesions are local and involve all layers of the intestinal wall.

23. **Answer: C. Heredity**
   Rationale: The cause is unknown but is thought to be multifactorial. Heredity, infectious agents, altered immunity or autoimmune and environmental are factors to be considered. Test taking skill: which does not belong? Options a, b, and d are all modifiable factors.

24. **Answer: B. Altered immunity**
   Rationale: refer to rationale for number 23. Test taking skill: which does not belong? Options a, c and d are all modifiable factors.

25. **Answer: A. A demanding and stressful job.**
   Rationale: Stress is an environmental factor that is thought to cause ulcerative colitis. Test taking skill: options b, c, and d are all healthy lifestyles.

26. **Answer: B. A non-inflamed outpouching of the intestine.**
   Rationale: An increase intraluminal pressure causes the outpouching of the colon wall resulting to diverticulosis. Option a suggests diverticulitis. Test taking skill: one of the opposite is the correct answer.

27. **Answer: A. Low–Fiber Diet**
   Rationale: A lack of adequate blood supply and nutrients from the diet such as low fiber foods may contribute to the development of the disease. Test taking skill: one of the opposite is the correct answer.

28. **Answer: B. Barium enema**
   Rationale: Barium enema is used to diagnose diverticulosis, however, this is contraindicated when diverticulitis is present because of the risk of rupturing the diverticulum. Test taking skill: options b and c are opposite; one may be the correct answer.

29. **Answer: B. Increase fiber in the diet.**
   Rationale: Patient with diverticulosis must be encouraged to increase roughage in diet such as fruits and vegetables rich in fiber. Increasing fluid intake 2 – 3 liters/day unless contraindicated rather reducing. Administering antibiotics can decrease bowel flora and infection but this is a dependent function of a nurse.

30. **Answer: B. Normal**
   Rationale: Mr. Trinidad’s BMI is 23 which is normal. Refer to rationale number 15.

31. **Answer: C. passage of stool is more than 3 bowel movements per day (thanks to Budek**
32. **Answer: B. Altered Immunity**  
**Rationale:** Diarrhea is an intestinal disorder that is self-limiting. Options a, c and d are etiological factors of diarrhea.

33. **Answer: C. Cardiac dysrhythmias**  
**Rationale:** Due to increase frequency and fluid content in the stools, diarrhea may cause fluid and electrolyte imbalance such as hypokalemia. Once potassium is depleted, this will affect the contractility of the heart causing cardiac arrhythmia leading to death.

34. **Answer: B. Metabolic acidosis**  
**Rationale:** In diarrhea, metabolic acidosis is the acid–base imbalance that occurs while in vomiting, metabolic alkalosis occur. This is a metabolic disorder that’s why eliminate options c and d.

35. **Answer: D. Oresol**  
**Rationale:** In the DOH book, oresol is the immediate home care management for diarrhea to prevent dehydration. Water may not be enough to prevent diarrhea.

36. **Answer: A. High pitched tinkling or rumbling bowel sounds**  
**Rationale:** Early in the bowel obstruction, the bowel attempts to move the contents past the obstruction and this is heard as high pitched tinkling bowel sounds. As the obstruction progresses, bowel sounds will diminish and may finally become absent.

37. **Answer: B. Decompression of bowel**  
**Rationale:** The NGT’s primary purpose is for bowel decompression especially for clients suffering from obstruction.

38. **Answer: A. Absent bowel sounds**  
**Rationale:** Post-operatively, no bowel sounds are present so this is a normal finding. Bleeding and hemorrhage must be prevented to avoid complications. Bowel movement occurs only after flatus and bowel sounds are noted.

39. **Answer: A. Use of natural laxatives**  
**Rationale:** The use of natural laxatives such as foods and fruits high in fiber is still the best way of preventing constipation. Increasing fluid intake, taking laxatives judiciously and exercise also can prevent this.

40. **Answer: A. Assess for signs of peritonitis**  
**Rationale:** Assessment precedes intervention. Symptoms presented are signs of peritonitis. Assessment will provide you the data for prompt intervention.

41. **Answer: A. The pain is localized at a position halfway between the umbilicus and the right iliac crest.**
Rationale: Pain over McBurney’s point, the point halfway between the umbilicus and the iliac crest, is diagnosis for appendicitis. Options b and c are common with ulcers; option d may suggest ulcerative colitis or diverticulitis.

42. Answer: A. A fecalith
Rationale: A fecalith is a hard piece of stool which is stone like that commonly obstructs the lumen. Due to obstruction, inflammation and bacterial invasion can occur. Tumors or foreign bodies may also cause obstruction.

43. Answer: C. WBC 13, 000/mm3
Rationale: Increase in WBC counts is suggestive of appendicitis because of bacterial invasion and inflammation. Normal WBC count is 5, 000 – 10, 000/mm3. Other options are normal values.

44. Answer: D. Lying with legs drawn up
Rationale: Posturing by lying with legs drawn up can relax the abdominal muscle thus relieve pain.

45. Answer: B. The appendix may have ruptured
Rationale: If a confirmed diagnosis is made and the pain suddenly without any intervention, the appendix may have ruptured; the pain is lessened because the appendix is no longer distended thus surgery is still needed.

46. Answer: B. Three vaginal delivery pregnancies
Rationale: Hemorrhoids are associated with prolonged sitting, or standing, portal hypertension, chronic constipation and prolonged intra abdominal pressure as associated with pregnancy and the strain of vaginal delivery. Her job as a schoolteacher does not require prolong sitting or standing. Age and leg varicosities are not related to the development of hemorrhoids.

47. Answer: C. Avoid strainining during defecation
Rationale: Straining can increase intra abdominal pressure. Health teachings also include: suggest to eat high roughage diet, wearing of cotton undergarments and use of sitz bath for 15 minutes.

48. Answer: B. causes coagulation(clumping) of proteins in the cells of the perianal skin or the lining of the anal canal
Rationale: Option a are local anesthetics; c are antiseptics and d are keratolytics.

49. Answer: C. Side – lying
Rationale: Positioning in the early postoperative phase should avoid stress and pressure on the operative site. The prone and side – lying are ideal from a comfort perspective. A high Fowler’s or supine position will place pressure on the operative site and is not recommended. There is no need for trendelenburg’s position.

50. Answer: A. Hemorrhage
Rationale: Applying heat during the immediate postoperative period may cause hemorrhage at
the surgical site. Moist heat may relieve rectal spasms after bowel movements. Urinary retention caused by reflex spasm may also be relieved by moist heat. Increasing fiber and fluid in the diet can help constipation.

**Cardiovascular Disorders**

1. Which of the following arteries primarily feeds the anterior wall of the heart?
   a. Circumflex artery
   b. Internal mammary artery
   c. Left anterior descending artery
   d. Right coronary artery

2. When do coronary arteries primarily receive blood flow?
   a. During inspiration
   b. During diastole
   c. During expiration
   d. During systole

3. Which of the following illnesses is the leading cause of death in the US?
   a. Cancer
   b. Coronary artery disease
   c. Liver failure
   d. Renal failure

4. Which of the following conditions most commonly results in CAD?
   a. Atherosclerosis
   b. DM
   c. MI
   d. Renal failure

5. Atherosclerosis impedes coronary blood flow by which of the following mechanisms?
   a. Plaques obstruct the vein
   b. Plaques obstruct the artery
   c. Blood clots form outside the vessel wall
   d. Hardened vessels dilate to allow the blood to flow through
6. Which of the following risk factors for coronary artery disease cannot be corrected?

a. Cigarette smoking  
b. DM  
c. Heredity  
d. HPN

7. Exceeding which of the following serum cholesterol levels significantly increases the risk of coronary artery disease?

a. 100 mg/dl  
b. 150 mg/dl  
c. 175 mg/dl  
d. 200 mg/dl

8. Which of the following actions is the first priority care for a client exhibiting signs and symptoms of coronary artery disease?

a. Decrease anxiety  
b. Enhance myocardial oxygenation  
c. Administer sublingual nitroglycerin  
d. Educate the client about his symptoms

9. Medical treatment of coronary artery disease includes which of the following procedures?

a. Cardiac catheterization  
b. Coronary artery bypass surgery  
c. Oral medication administration  
d. Percutaneous transluminal coronary angioplasty

10. Prolonged occlusion of the right coronary artery produces an infarction in which of the following areas of the heart?

a. Anterior  
b. Apical  
c. Inferior  
d. Lateral

11. Which of the following is the most common symptom of myocardial infarction?

a. Chest pain
b. Dyspnea  
c. Edema  
d. Palpitations

12. Which of the following landmarks is the correct one for obtaining an apical pulse?

a. Left intercostal space, midaxillary line  
b. Left fifth intercostal space, midclavicular line  
c. Left second intercostal space, midclavicular line  
d. Left seventh intercostal space, midclavicular line

13. Which of the following systems is the most likely origin of pain the client describes as knifelike chest pain that increases in intensity with inspiration?

a. Cardiac  
b. Gastrointestinal  
c. Musculoskeletal  
d. Pulmonary

14. A murmur is heard at the second left intercostal space along the left sternal border. Which valve area is this?

a. Aortic  
b. Mitral  
c. Pulmonic  
d. Tricuspid

15. Which of the following blood tests is most indicative of cardiac damage?

a. Lactate dehydrogenase  
b. Complete blood count  
c. Troponin I  
d. Creatine kinase

16. What is the primary reason for administering morphine to a client with myocardial infarction?

a. To sedate the client  
b. To decrease the client's pain  
c. To decrease the client's anxiety  
d. To decrease oxygen demand on the client's heart
17. Which of the following conditions is most commonly responsible for myocardial infarction?

a. Aneurysm  
b. Heart failure  
c. Coronary artery thrombosis  
d. Renal failure  

18. What supplemental medication is most frequently ordered in conjunction with furosemide (Lasix)?

a. Chloride  
b. Digoxin  
c. Potassium  
d. Sodium  

19. After myocardial infarction, serum glucose levels and free fatty acids are both increase. What type of physiologic changes are these?

a. Electrophysiologic  
b. Hematologic  
c. Mechanical  
d. Metabolic  

20. Which of the following complications is indicated by a third heart sound (S3)?

a. Ventricular dilation  
b. Systemic hypertension  
c. Aortic valve malfunction  
d. Increased atrial contractions  

21. After an anterior wall myocardial infarction, which of the following problems is indicated by auscultation of crackles in the lungs?

a. Left-sided heart failure  
b. Pulmonic valve malfunction  
c. Right-sided heart failure  
d. Tricuspid valve malfunction  

22. Which of the following diagnostic tools is most commonly used to determine the location of myocardial damage?
23. What is the first intervention for a client experiencing myocardial infarction?

a. Administer morphine  
b. Administer oxygen  
c. Administer sublingual nitroglycerin  
d. Obtain an electrocardiogram

24. What is the most appropriate nursing response to a myocardial infarction client who is fearful of dying?

a. "Tell me about your feeling right now."  
b. "When the doctor arrives, everything will be fine."  
c. "This is a bad situation, but you'll feel better soon."  
d. "Please be assured we're doing everything we can to make you feel better."

25. Which of the following classes of medications protects the ischemic myocardium by blocking catecholamines and sympathetic nerve stimulation?

a. Beta-adrenergic blockers  
b. Calcium channel blockers  
c. Narcotics  
d. Nitrates

26. What is the most common complication of a myocardial infarction?

a. Cardiogenic shock  
b. Heart failure  
c. Arrhythmias  
d. Pericarditis

27. With which of the following disorders is jugular vein distention most prominent?

a. Abdominal aortic aneurysm  
b. Heart failure  
c. Myocardial infarction  
d. Pneumothorax
28. What position should the nurse place the head of the bed in to obtain the most accurate reading of jugular vein distention?
   a. High-fowler's
   b. Raised 10 degrees
   c. Raised 30 degrees
   d. Supine position

29. Which of the following parameters should be checked before administering digoxin?
   a. Apical pulse
   b. Blood pressure
   c. Radial pulse
   d. Respiratory rate

30. Toxicity from which of the following medications may cause a client to see a green halo around lights?
   a. Digoxin
   b. Furosemide
   c. Metoprolol
   d. Enalapril

31. Which of the following symptoms is most commonly associated with left-sided heart failure?
   a. Crackles
   b. Arrhythmias
   c. Hepatic engorgement
   d. Hypotension

32. In which of the following disorders would the nurse expect to assess sacral edema in bedridden client?
   a. DM
   b. Pulmonary emboli
   c. Renal failure
   d. Right-sided heart failure

33. Which of the following symptoms might a client with right-sided heart failure exhibit?
   a. Adequate urine output
b. Polyuria
c. Oliguria
d. Polydipsia

34. Which of the following classes of medications maximizes cardiac performance in clients with heart failure by increasing ventricular contractility?

a. Beta-adrenergic blockers
b. Calcium channel blockers
c. Diuretics
d. Inotropic agents

35. Stimulation of the sympathetic nervous system produces which of the following responses?

a. Bradycardia
b. Tachycardia
c. Hypotension
d. Decreased myocardial contractility

36. Which of the following conditions is most closely associated with weight gain, nausea, and a decrease in urine output?

a. Angina pectoris
b. Cardiomyopathy
c. Left-sided heart failure
d. Right-sided heart failure

37. What is the most common cause of abdominal aortic aneurysm?

a. Atherosclerosis
b. DM
c. HPN
d. Syphilis

38. In which of the following areas is an abdominal aortic aneurysm most commonly located?

a. Distal to the iliac arteries
b. Distal to the renal arteries
c. Adjacent to the aortic branch
d. Proximal to the renal arteries
39. A pulsating abdominal mass usually indicates which of the following conditions?
   a. Abdominal aortic aneurysm
   b. Enlarged spleen
   c. Gastic distention
   d. Gastritis

40. What is the most common symptom in a client with abdominal aortic aneurysm?
   a. Abdominal pain
   b. Diaphoresis
   c. Headache
   d. Upper back pain

41. Which of the following symptoms usually signifies rapid expansion and impending rupture of an abdominal aortic aneurysm?
   a. Abdominal pain
   b. Absent pedal pulses
   c. Angina
   d. Lower back pain

42. What is the definitive test used to diagnose an abdominal aortic aneurysm?
   a. Abdominal X-ray
   b. Arteriogram
   c. CT scan
   d. Ultrasound

43. Which of the following complications is of greatest concern when caring for a preoperative abdominal aneurysm client?
   a. HPN
   b. Aneurysm rupture
   c. Cardiac arrhythmias
   d. Diminished pedal pulses

44. Which of the following blood vessel layers may be damaged in a client with an aneurysm?
   a. Externa
   b. Interna
   c. Media
45. When assessing a client for an abdominal aortic aneurysm, which area of the abdomen is most commonly palpated?
   a. Right upper quadrant
   b. Directly over the umbilicus
   c. Middle lower abdomen to the left of the midline
   d. Midline lower abdomen to the right of the midline

46. Which of the following conditions is linked to more than 50% of clients with abdominal aortic aneurysms?
   a. DM
   b. HPN
   c. PVD
   d. Syphilis

47. Which of the following sounds is distinctly heard on auscultation over the abdominal region of an abdominal aortic aneurysm client?
   a. Bruit
   b. Crackles
   c. Dullness
   d. Friction rubs

48. Which of the following groups of symptoms indicated a ruptured abdominal aneurysm?
   a. Lower back pain, increased BP, decreased RBC, increased WBC
   b. Severe lower back pain, decreased BP, decreased RBC, increased WBC
   c. Severe lower back pain, decreased BP, decreased RBC, decreased WBC
   d. Intermittent lower back pain, decreased BP, decreased RBC, increased WBC

49. Which of the following complications of an abdominal aortic repair is indicated by detection of a hematoma in the perineal area?
   a. Hernia
   b. Stage 1 pressure ulcer
   c. Retroperitoneal rupture at the repair site
   d. Rapid expansion of the aneurysm
50. Which hereditary disease is most closely linked to aneurysm?
   a. Cystic fibrosis
   b. Lupus erythematosus
   c. Marfan's syndrome
   d. Myocardial infarction

51. Which of the following treatments is the definitive one for a ruptured aneurysm?
   a. Antihypertensive medication administration
   b. Aortogram
   c. Beta-adrenergic blocker administration
   d. Surgical intervention

52. Which of the following heart muscle diseases is unrelated to other cardiovascular disease?
   a. Cardiomyopathy
   b. Coronary artery disease
   c. Myocardial infarction
   d. Pericardial Effusion

53. Which of the following types of cardiomyopathy can be associated with childbirth?
   a. Dilated
   b. Hypertrophic
   c. Myocarditis
   d. Restrictive

54. Septal involvement occurs in which type of cardiomyopathy?
   a. Congestive
   b. Dilated
   c. Hypertrophic
   d. Restrictive

55. Which of the following recurring conditions most commonly occurs in clients with cardiomyopathy?
   a. Heart failure
   b. DM
   c. MI
   d. Pericardial effusion
56. What is the term used to describe an enlargement of the heart muscle?
   a. Cardiomegaly
   b. Cardiomyopathy
   c. Myocarditis
   d. Pericarditis

57. Dyspnea, cough, expectoration, weakness, and edema are classic signs and symptoms of which of the following conditions?
   a. Pericarditis
   b. Hypertension
   c. Obliterative
   d. Restrictive

58. Which of the following types of cardiomyopathy does not affect cardiac output?
   a. Dilated
   b. Hypertrophic
   c. Restrictive
   d. Obliterative

59. Which of the following cardiac conditions does a fourth heart sound (S4) indicate?
   a. Dilated aorta
   b. Normally functioning heart
   c. Decreased myocardial contractility
   d. Failure of the ventricle to eject all the blood during systole

60. Which of the following classes of drugs is most widely used in the treatment of cardiomyopathy?
   a. Antihypertensive
   b. Beta-adrenergic blockers
   c. Calcium channel blockers
   d. Nitrates

**c. Left anterior descending artery**
The left anterior descending artery is the primary source of blood for the anterior wall of the
heart. The circumflex artery supplies the lateral wall, the internal mammary artery supplies the mammary, and the right coronary artery supplies the inferior wall of the heart.

2. b. During diastole
Although the coronary arteries may receive a minute portion of blood during systole, most of the blood flow to coronary arteries is supplied during diastole. Breathing patterns are irrelevant to blood flow.

3. b. Coronary artery disease
Coronary artery disease accounts for over 50% of all deaths in the US. Cancer accounts for approximately 20%. Liver failure and renal failure account for less than 10% of all deaths in the US.

4. a. Atherosclerosis
Atherosclerosis, or plaque formation, is the leading cause of CAD. DM is a risk factor for CAD but isn't the most common cause. Renal failure doesn't cause CAD, but the two conditions are related. Myocardial infarction is commonly a result of CAD.

5. b. Plaques obstruct the artery
Arteries, not veins, supply the coronary arteries with oxygen and other nutrients. Atherosclerosis is a direct result of plaque formation in the artery. Hardened vessels can't dilate properly and, therefore, constrict blood flow.

6. c. Heredity
Because "heredity" refers to our genetic makeup, it can't be changed. Cigarette smoking cessation is a lifestyle change that involves behavior modification. Diabetes mellitus is a risk factor that can be controlled with diet, exercise, and medication. Altering one's diet, exercise, and medication can correct hypertension.

7. d. 200 mg/dl
Cholesterol levels above 200 mg/dl are considered excessive. They require dietary restriction and perhaps medication. Exercise also helps reduce cholesterol levels. The other levels listed are all below the nationally accepted levels for cholesterol and carry a lesser risk for CAD.

8. b. Enhance myocardial oxygenation
Enhancing myocardial oxygenation is always the first priority when a client exhibits signs and symptoms of cardiac compromise. Without adequate oxygen, the myocardium suffers damage. Sublingual nitroglycerin is administered to treat acute angina, but its administration isn't the first priority. Although educating the client and decreasing anxiety are important in care delivery, neither are priorities when a client is compromised.

9. c. Oral medication administration
Oral medication administration is a noninvasive, medical treatment for coronary artery disease. Cardiac catheterization isn't a treatment but a diagnostic tool. Coronary artery bypass surgery and percutaneous transluminal coronary angioplasty are invasive, surgical treatments.
10. c. Inferior
The right coronary artery supplies the right ventricle, or the inferior portion of the heart. Therefore, prolonged occlusion could produce an infarction in that area. The right coronary artery doesn't supply the anterior portion (left ventricle), lateral portion (some of the left ventricle and the left atrium), or the apical portion (left ventricle) of the heart.

11. a. Chest pain
The most common symptom of an MI is chest pain, resulting from deprivation of oxygen to the heart. Dyspnea is the second most common symptom, related to an increase in the metabolic needs of the body during an MI. Edema is a later sign of heart failure, often seen after an MI. Palpitations may result from reduced cardiac output, producing arrhythmias.

12. b. Left fifth intercostal space, midclavicular line
The correct landmark for obtaining an apical pulse is the left intercostal space in the midclavicular line. This is the point of maximum impulse and the location of the left ventricular apex. The left second intercostal space in the midclavicular line is where the pulmonic sounds are auscultated. Normally, heart sounds aren't heard in the midaxillary line or the seventh intercostal space in the midclavicular line.

13. d. Pulmonary
Pulmonary pain is generally described by these symptoms. Musculoskeletal pain only increase with movement. Cardiac and GI pains don't change with respiration.

14. c. Pulmonic
Abnormalities of the pulmonic valve are auscultated at the second left intercostal space along the left sternal border. Aortic valve abnormalities are heard at the second intercostal space, to the right of the sternum. Mitral valve abnormalities are heard at the fifth intercostal space in the midclavicular line. Tricuspid valve abnormalities are heard at the third and fourth intercostal spaces along the sternal border.

15. c. Troponin I
Troponin I levels rise rapidly and are detectable within 1 hour of myocardial injury. Troponin I levels aren't detectable in people without cardiac injury. Lactate dehydrogenase is present in almost all body tissues and not specific to heart muscle. LDH isoenzymes are useful in diagnosing cardiac injury. CBC is obtained to review blood counts, and a complete chemistry is obtained to review electrolytes. Because CK levels may rise with skeletal muscle injury, CK isoenzymes are required to detect cardiac injury.

16. d. To decrease oxygen demand on the client's heart
Morphine is administered because it decreases myocardial oxygen demand. Morphine will also decrease pain and anxiety while causing sedation, but isn't primarily given for those reasons.

17. c. Coronary artery thrombosis
Coronary artery thrombosis causes occlusion of the artery, leading to myocardial death. An aneurysm is an outpouching of a vessel and doesn't cause an MI. Renal failure can be associated with MI but isn't a direct cause. Heart failure is usually the result of an MI.
18. **c. Potassium**
Supplemental potassium is given with furosemide because of the potassium loss that occurs as a result of this diuretic. Chloride and sodium aren’t loss during diuresis. Digoxin acts to increase contractility but isn’t given routinely with furosemide.

19. **d. Metabolic**
Both glucose and fatty acids are metabolites whose levels increase after a myocardial infarction. Mechanical changes are those that affect the pumping action of the heart, and electro physiologic changes affect conduction. Hematologic changes would affect the blood.

20. **a. Ventricular dilation**
Rapid filling of the ventricles causes vasodilation that is auscultated as S3. Increased atrial contraction or systemic hypertension can result is a fourth heart sound. Aortic valve malfunction is heard as a murmur.

21. **a. Left-sided heart failure**
The left ventricle is responsible for the most of the cardiac output. An anterior wall MI may result in a decrease in left ventricular function. When the left ventricle doesn’t function properly, resulting in left-sided heart failure, fluid accumulates in the interstitial and alveolar spaces in the lungs and causes crackles. Pulmonic and tricuspid valve malfunction causes right-sided heart failure.

22. **d. Electrocardiogram**
The ECG is the quickest, most accurate, and most widely used tool to determine the location of myocardial infarction. Cardiac enzymes are used to diagnose MI but can’t determine the location. An echocardiogram is used most widely to view myocardial wall function after an MI has been diagnosed. Cardiac catheterization is an invasive study for determining coronary artery disease and may also indicate the location of myocardial damage, but the study may not be performed immediately.

23. **b. Administer oxygen**
Administering supplemental oxygen to the client is the first priority of care. The myocardium is deprived of oxygen during an infarction, so additional oxygen is administered to assist in oxygenation and prevent further damage. Morphine and sublingual nitroglycerin are also used to treat MI, but they’re more commonly administered after the oxygen. An ECG is the most common diagnostic tool used to evaluate MI.

24. **a. "Tell me about your feeling right now."**
Validation of the client’s feelings is the most appropriate response. It gives the client a feeling of comfort and safety. The other three responses give the client false hope. No one can determine if a client experiencing MI will feel or get better and therefore, these responses are inappropriate.

25. **a. Beta-adrenergic blockers**
Beta-adrenergic blockers work by blocking beta receptors in the myocardium, reducing the response to catecholamines and sympathetic nerve stimulation. They protect the myocardium,
helping to reduce the risk of another infarction by decreasing the workload of the heart and decreasing myocardial oxygen demand. Calcium channel blockers reduce the workload of the heart by decreasing the heart rate. Narcotics reduce myocardial oxygen demand, promote vasodilation, and decreased anxiety. Nitrates reduce myocardial oxygen consumption by decreasing left ventricular end-diastolic pressure (preload) and systemic vascular resistance (afterload).

26. **c. Arrhythmias**
Arrhythmias, caused by oxygen deprivation to the myocardium, are the most common complication of an MI. Cardiogenic shock, another complication of MI, is defined as the end stage of left ventricular dysfunction. The condition occurs in approximately 15% of clients with MI. Because the pumping function of the heart is compromised by an MI, heart failure is the second most common complication. Pericarditis most commonly results from a bacterial or viral infection but may occur after MI.

27. **b. Heart failure**
Elevated venous pressure, exhibited as jugular vein distention, indicates a failure of the heart to pump. Jugular vein distention isn’t a symptom of abdominal aortic aneurysm or pneumothorax. An MI, if severe enough, can progress to heart failure; however, in and of itself, an MI doesn’t cause jugular vein distention.

28. **c. Raised 30 degrees**
Jugular venous pressure is measured with a centimeter ruler to obtain the vertical distance between the sternal angle and the point of highest pulsation with the head of the bed inclined between 15 and 30 degrees. Inclined pressure can’t be seen when the client is supine or when the head of the bed is raised 10 degrees because the point that marks the pressure level is above the jaw (therefore, not visible). In high Fowler’s position, the veins would be barely discernible above the clavicle.

29. **a. Apical pulse**
An apical pulse is essential or accurately assessing the client’s heart rate before administering digoxin. The apical pulse is the most accurate point in the body. Blood pressure is usually only affected if the heart rate is too low, in which case the nurse would withhold digoxin. The radial pulse can be affected by cardiac and vascular disease and therefore, won’t always accurately depict the heart rate. Digoxin has no effect on respiratory function.

30. **a. Digoxin**
One of the most common signs of digoxin toxicity is the visual disturbance known as the green halo sign. The other medications aren’t associated with such an effect.

31. **a. Crackles**
Crackles in the lungs are a classic sign of left-sided heart failure. These sounds are caused by fluid backing up into the pulmonary system. Arrhythmias can be associated with both right and left-sided heart failure. Left-sided heart failure causes hypertension secondary to an increased workload on the system.
32. **d. Right-sided heart failure**
The most accurate area on the body to assess dependent edema in a bedridden client is the sacral area. Sacral, or dependent, edema is secondary to right-sided heart failure. Diabetes mellitus, pulmonary emboli, and renal disease aren’t directly linked to sacral edema.

33. **c. Oliguria**
Inadequate deactivation of aldosterone by the liver after right-sided heart failure leads to fluid retention, which causes oliguria. Adequate urine output, polyuria, and polydipsia aren’t associated with right-sided heart failure.

34. **d. Inotropic agents**
Inotropic agents are administered to increase the force of the heart’s contractions, thereby increasing ventricular contractility and ultimately increasing cardiac output. Beta-adrenergic blockers and calcium channel blockers decrease the heart rate and ultimately decrease the workload of the heart. Diuretics are administered to decrease the overall vascular volume, also decreasing the workload of the heart.

35. **b. Tachycardia**
Stimulation of the sympathetic nervous system causes tachycardia and increased contractility. The other symptoms listed are related to the parasympathetic nervous system, which is responsible for slowing the heart rate.

36. **d. Right-sided heart failure**
Weight gain, nausea, and a decrease in urine output are secondary effects of right-sided heart failure. Cardiomyopathy is usually identified as a symptom of left-sided heart failure. Left-sided heart failure causes primarily pulmonary symptoms rather than systemic ones. Angina pectoris doesn’t cause weight gain, nausea, or a decrease in urine output.

37. **a. Atherosclerosis**
Atherosclerosis accounts for 75% of all abdominal aortic aneurysms. Plaques build up on the wall of the vessel and weaken it, causing an aneurysm. Although the other conditions are related to the development of an aneurysm, none is a direct cause.

38. **b. Distal to the renal arteries**
The portion of the aorta distal to the renal arteries is more prone to an aneurysm because the vessel isn’t surrounded by stable structures, unlike the proximal portion of the aorta. Distal to the iliac arteries, the vessel is again surrounded by stable vasculature, making this an uncommon site for an aneurysm. There is no area adjacent to the aortic arch, which bends into the thoracic (descending) aorta.

39. **a. Abdominal aortic aneurysm**
The presence of a pulsating mass in the abdomen is an abnormal finding, usually indicating an outpouching in a weakened vessel, as in abdominal aortic aneurysm. The finding, however, can be normal on a thin person. Neither an enlarged spleen, gastritis, nor gastric distention cause pulsation.
40. **a. Abdominal pain**
Abdominal pain in a client with an abdominal aortic aneurysm results from the disruption of normal circulation in the abdominal region. Lower back pain, not upper, is a common symptom, usually signifying expansion and impending rupture of the aneurysm. Headache and diaphoresis aren’t associated with abdominal aortic aneurysm.

41. **d. Lower back pain**
Lower back pain results from expansion of the aneurysm. The expansion applies pressure in the abdominal cavity, and the pain is referred to the lower back. Abdominal pain is most common symptom resulting from impaired circulation. Absent pedal pulses are a sign of no circulation and would occur after a ruptured aneurysm or in peripheral vascular disease. Angina is associated with atherosclerosis of the coronary arteries.

42. **b. Arteriogram**
An arteriogram accurately and directly depicts the vasculature; therefore, it clearly delineates the vessels and any abnormalities. An abdominal aneurysm would only be visible on an X-ray if it were calcified. CT scan and ultrasound don’t give a direct view of the vessels and don’t yield as accurate a diagnosis as the arteriogram.

43. **b. Aneurysm rupture**
Rupture of the aneurysm is a life-threatening emergency and is of the greatest concern for the nurse caring for this type of client. Hypertension should be avoided and controlled because it can cause the weakened vessel to rupture. Diminished pedal pulses, a sign of poor circulation to the lower extremities, are associated with an aneurysm but isn’t life threatening. Cardiac arrhythmias aren’t directly linked to an aneurysm.

44. **c. Media**
The factor common to all types of aneurysms is a damaged media. The media has more smooth muscle and less elastic fibers, so it’s more capable of vasoconstriction and vasodilation. The interna and externa are generally no damaged in an aneurysm.

45. **c. Middle lower abdomen to the left of the midline**
The aorta lies directly left of the umbilicus; therefore, any other region is inappropriate for palpation.

46. **b. HPN**
Continuous pressure on the vessel walls from hypertension causes the walls to weaken and an aneurysm to occur. Atherosclerotic changes can occur with peripheral vascular diseases and are linked to aneurysms, but the link isn’t as strong as it is with hypertension. Only 1% of clients with syphilis experience an aneurysm. Diabetes mellitus doesn’t have direct link to aneurysm.

47. **a. Bruit**
A bruit, a vascular sound resembling heart murmur, suggests partial arterial occlusion. Crackles are indicative of fluid in the lungs. Dullness is heard over solid organs, such as the liver. Friction rubs indicate inflammation of the peritoneal surface.
48. **b. Severe lower back pain, decreased BP, decreased RBC, increased WBC**
Severe lower back pain indicates an aneurysm rupture, secondary to pressure being applied within the abdominal cavity. When rupture occurs, the pain is constant because it can’t be alleviated until the aneurysm is repaired. Blood pressure decreases due to the loss of blood. After the aneurysm ruptures, the vasculature is interrupted and blood volume is lost, so blood pressure wouldn’t increase. For the same reason, the RBC count is decreased – not increase. The WBC count increases as cells migrate to the site of injury.

49. **c. Retroperitoneal rupture at the repair site**
Blood collects in the retroperitoneal space and is exhibited as a hematoma in the perineal area. This rupture is most commonly caused by leakage at the repair site. A hernia doesn’t cause vascular disturbances, nor does a pressure ulcer. Because no bleeding occurs with rapid expansion of the aneurysm, a hematoma won’t form.

50. **c. Marfan's syndrome**
Marfan’s syndrome results in the degeneration of the elastic fibers of the aortic media. Therefore, clients with the syndrome are more likely to develop an aortic aneurysm. Although cystic fibrosis is hereditary, it hasn’t been linked to aneurysms. Lupus erythematosus isn’t hereditary. Myocardial infarction is neither hereditary nor a disease.

51. **d. Surgical intervention**
When the vessel ruptures, surgery is the only intervention that can repair it. Administration of antihypertensive medications and beta-adrenergic blockers can help control hypertension, reducing the risk of rupture. An aortogram is a diagnostic tool used to detect an aneurysm.

52. **a. Cardiomyopathy**
Cardiomyopathy isn’t usually related to an underlying heart disease such as atherosclerosis. The etiology in most cases is unknown. Coronary artery disease and myocardial infarction are directly related to atherosclerosis. Pericardial effusion is the escape of fluid into the pericardial sac, a condition associated with pericarditis and advanced heart failure.

53. **a. Dilated**
Although the cause isn’t entirely known, cardiac dilation and heart failure may develop during the last month of pregnancy of the first few months after birth. The condition may result from a preexisting cardiomyopathy not apparent prior to pregnancy. Hypertrophic cardiomyopathy is an abnormal symmetry of the ventricles that has an unknown etiology but a strong familial tendency. Myocarditis isn’t specifically associated with childbirth. Restrictive cardiomyopathy indicates constrictive pericarditis; the underlying cause is usually myocardial.

54. **c. Hypertrophic**
In hypertrophic cardiomyopathy, hypertrophy of the ventricular septum – not the ventricle chambers – is apparent. This abnormality isn’t seen in other types of cardiomyopathy.

55. **a. Heart failure**
Because the structure and function of the heart muscle is affected, heart failure most commonly occurs in clients with cardiomyopathy. Myocardial infarction results from prolonged myocardial
ischemia due to reduced blood flow through one of the coronary arteries. Pericardial effusion is most predominant in clients with percarditis. Diabetes mellitus is unrelated to cardiomyopathy.

56. a. Cardiomegaly
Cardiomegaly denotes an enlarged heart muscle. Cardiomyopathy is a heart muscle disease of unknown origin. Myocarditis refers to inflammation of heart muscle. Pericarditis is an inflammation of the pericardium, the sac surrounding the heart.

57. d. Restrictive
These are the classic symptoms of heart failure. Pericarditis is exhibited by a feeling of fullness in the chest and auscultation of a pericardial friction rub. Hypertension is usually exhibited by headaches, visual disturbances and a flushed face. Myocardial infarction causes heart failure but isn’t related to these symptoms.

58. b. Hypertrophic
Cardiac output isn’t affected by hypertrophic cardiomyopathy because the size of the ventricle remains relatively unchanged. Dilated cardiomyopathy, and restrictive cardomyopathy all decrease cardiac output.

59. d. Failure of the ventricle to eject all the blood during systole
An S4 occurs as a result of increased resistance to ventricular filling after atrial contraction. This increased resistance is related to decrease compliance of the ventricle. A dilated aorta doesn’t cause an extra heart sound, though it does cause a murmur. Decreased myocardial contractility is heard as a third heart sound. An s4 isn’t heard in a normally functioning heart.

60. b. Beta-adrenergic blockers
By decreasing the heart rate and contractility, beta-adrenergic blockers improve myocardial filling and cardiac output, which are primary goals in the treatment of cardiomyopathy. Antihypertensives aren’t usually indicated because they would decrease cardiac output in clients who are often already hypotensive. Calcium channel blockers are sometimes used for the same reasons as beta-adrenergic blockers; however, they aren’t as effective as beta-adrenergic blockers and cause increase hypotension. Nitrates aren’t used because of their dilating effects, which would further compromise the myocardium.

Cancer

1. You are caring for a patient with esophageal cancer. Which task could be delegated to the nursing assistant?

a. Assist the patient with oral hygiene.
b. Observe the patient’s response to feedings.
c. Facilitate expression of grief or anxiety.
d. Initiate daily weights.

2. A 56-year-old patient comes to the walk-in clinic for scant rectal bleeding and intermittent diarrhea and constipation for the past several months. There is a history of polyps and a family history for colorectal cancer. While you are trying to teach about colonoscopy, the patient becomes angry and threatens to leave. What is the priority diagnosis?

a. Diarrhea/Constipation related to altered bowel patterns
b. Knowledge Deficit related to disease process and diagnostic procedure
c. Risk for Fluid Volume Deficit related to rectal bleeding and diarrhea
d. Anxiety related to unknown outcomes and perceive threat to body integrity

3. Which patient is at greatest risk for pancreatic cancer?

a. An elderly black male with a history of smoking and alcohol use
b. A young, white obese female with no known health issues
c. A young black male with juvenile onset diabetes
d. An elderly white female with a history of pancreatitis

4. The disease progress of cancers, such as cervical or Hodgkin’s, can be classified according to a clinical staging system. Place the description of stages 0-IV in the correct order.

a. Metastasis
b. Limited local spread
c. Cancer in situ
d. Tumor limited to tissue of origin
e. Extensive local and regional spread

_____ , _____ , _____ , _____ , _____

5. In assigning patients with alterations related to gastrointestinal (GI) cancer, which would be the most appropriate nursing care tasks to assign to the LPN/LVN, under supervision of the team leader RN?

a. A patient with severe anemia secondary to GI bleeding
b. A patient who needs enemas and antibiotics to control GI bacteria
c. A patient who needs pre-op teaching for bowel resection surgery
d. A patient who needs central line insertion for chemotherapy

6. A community health center is preparing a presentation on the prevention and detection of cancer. Which health care professional (RN, LPN/LVN, nurse practitioner, nutritionist) should be assigned to address the following topics?
a. Explain screening exams and diagnostic testing for common cancers

b. How to plan a balanced diet and reduce fats and preservatives

c. Prepare a poster on the seven warning signs of cancer

d. How to practice breast or testicular self-examination

e. Strategies for reducing risk factors such as smoking and obesity

7. The physician tells the patient that there will be an initial course of treatment with continued maintenance treatments and ongoing observation for signs and symptoms over a prolonged period of time. You can help the patient by reinforcing that the primary goal for this type of treatment is:

a. Cure
b. Control
c. Palliation
d. Permanent remission

8. For a patient who is experiencing side effects of radiation therapy, which task would be the most appropriate to delegate to the nursing assistant?

a. Assist the patient to identify patterns of fatigue.
b. Recommend participation in a walking program.
c. Report the amount and type of food consumed from the tray.
d. Check the skin for redness and irritation after the treatment.

9. For a patient on the chemotherapeutic drug vincristine (Oncovin), which of the following side effects should be reported to the physician?

a. Fatigue
b. Nausea and vomiting
c. Paresthesia
d. Anorexia

10. For a patient who is receiving chemotherapy, which laboratory result is of particular importance?

a. WBC
b. PT and PTT
c. Electrolytes
d. BUN
11. For care of a patient who has oral cancer, which task would be appropriate to delegate to the LPN/LVN?

a. Assist the patient to brush and floss.
b. Explain when brushing and flossing are contraindicated.
c. Give antacids and sucralfate suspension as ordered.
d. Recommend saliva substitutes.

12. When assigning staff to patients who are receiving chemotherapy, what is the major consideration about chemotherapeutic drugs?

a. During preparation, drugs may be absorbed through the skin or inhaled.
b. Many chemotherapeutics are vesicants.
c. Chemotherapeutics are frequently given through central nervous access devices.
d. Oral and venous routes are the most common.

13. You have just received the morning report from the night shift nurses. List the order of priority for assessing and caring for these patients.

a. A patient who developed tumor lysis syndrome around 5:00 AM
b. A patient with frequent reports of break-through pain over the past 24 hours
c. A patient scheduled for exploratory laparotomy this morning
d. A patient with anticipatory nausea and vomiting for the past 24 hours

_____  _____  _____  _____

14. In monitoring patients who are at risk for spinal cord compression related to tumor growth, what is the most likely early manifestation?

a. Sudden-onset back pain
b. Motor loss
c. Constipation
d. Urinary hesitancy

15. Chemotherapeutic treatment of acute leukemia is done in four phases. Place these phases in the correct order.

a. Maintenance
b. Induction
c. Intensification
d. Consolidation

_____  _____  _____  _____
16. Which set of classification values indicates the most extensive and progressed cancer?
   a. T1 N0 M0
   b. Tis N0 M0
   c. T1 N1 M0
   d. T4 N3 M1

17. For a patient with osteogenic sarcoma, you would be particularly vigilant for elevations in which laboratory value?
   a. Sodium
   b. Calcium
   c. Potassium
   d. Hematocrit

18. Which of the following cancer patients could potentially be placed together as roommates?
   a. A patient with a neutrophil count of 1000/mm³
   b. A patient who underwent debulking of a tumor to relieve pressure
   c. A patient receiving high-dose chemotherapy after a bone marrow harvest
   d. A patient who is post-op laminectomy for spinal cord compression

19. What do you tell patients is the most important risk factor for lung cancer when you are teaching about lung cancer prevention?
   a. Cigarette smoking
   b. Exposure to environmental/occupational carcinogens
   c. Exposure to environmental tobacco smoke (ETS)
   d. Pipe or cigar smoking

20. Following chemotherapy, a patient is being closely monitored for tumor lysis syndrome. Which laboratory value requires particular attention?
   a. Platelet count
   b. Electrolytes
   c. Hemoglobin
   d. Hematocrit

21. Persons at risk are the greater target population for cancer screening programs. Which asymptomatic patient(s) needs extra encouragement to participate in cancer screening? (Choose all that apply).
   a. 
   b. 
   c. 
   d. 

22. A patient with lung cancer develops syndrome of inappropriate antidiuretic hormone secretion (SIADH). After reporting symptoms of weight gain, weakness, and nausea and vomiting to the physician, you would anticipate which initial order for the treatment of this patient?

a. A fluid bolus as ordered
b. Fluid restrictions as ordered
c. Urinalysis as ordered
d. Sodium-restricted diet as ordered

23. In caring for a patient with neutropenia, what tasks can be delegated to the nursing assistant? (Choose all that apply).

a. Take vital signs every 4 hours
b. Report temperature elevation >100.4°F
c. Assess for sore throat, cough, or burning with urination.
d. Gather the supplies to prepare the room for protective isolation.
e. Report superinfections, such as candidiasis
f. Practice good handwashing technique.

24. A primary nursing responsibility is the prevention of lung cancer by assisting patients in smoking/tobacco cessation. Which tasks would be appropriate to delegate to the LPN/LVN?

a. Develop a “quit plan”
b. Explain the application of a nicotine patch
c. Discuss strategies to avoid relapse
d. Suggest ways to deal with urges for a tobacco

1. ANSWER A – Oral hygiene is within the scope of responsibilities of the nursing assistant. It is the responsibility of the nurse to observe response to treatments and to help the patient deal with loss or anxiety. The nursing assistant can be directed to weigh the patient, but should not be expected to know when to initiate that measurement.

2. ANSWER D – The patient's physical condition is currently stable, but emotional needs are affecting his or her ability to receive the information required to make an informed decision. The other diagnoses are relevant, but if the patient leaves the clinic for interventions may be delayed or ignored.

3. ANSWER A – Pancreatic cancer is more common in blacks, males, and smokers. Other links include alcohol, diabetes, obesity, history of pancreatitis, organic chemicals, a high-fat diet, and previous
abdominal radiation.

4. ANSWER C, D, B, E, A – This classification system is based on the extent of the disease rather than the histological changes, Stage 0: cancer in situ, stage I: tumor limited to tissue of origin, stage II: limited local spread, stage III: extensive local and regional spread, stage IV: metastasis.

5. ANSWER B – Administering enemas and antibiotics is within the scope of practice for LPN/LVNs. Although some states may allow the LPN/LVN to administer blood, in general, blood administration, pre-operative teaching, and assisting with central line insertion are the responsibilities of the RN.

6. ANSWER A. Nurse Practitioner, B. Nutritionist, C. LPN/LVN, D. Nurse Practitioner, E. RN – The nurse practitioner is often the provider who performs the physical examinations and recommends diagnostic testing. The nutritionist can give information about diet. The LPN/LVN will know the standard seven warning signs and can educate through standard teaching programs in some states. However, the RN has primary responsibility for educating people about risk factors.

7. ANSWER B – The physician has described a treatment for controlling cancer that is not curable. When the goal is cure, the patient will be deemed free of disease after treatments. In palliation, the treatment is given primarily for pain relief. Permanent remission is another term to describe cure.

8. ANSWER C – The nursing assistant can observe the amount that patient eats (or what is gone from the tray) and report to the nurse. Assessing patterns of fatigue or skin reaction is the responsibility of the RN. The initial recommendation for exercise should come from the physician.

9. ANSWER C – Paresthesia is a side effect associated with some chemotherapy drugs such as vincristine (Oncovin). The physician can modify the dose or discontinue the drug. Fatigue, nausea, vomiting, and anorexia are common side effects for many chemotherapy medications. The nurse can assist the patient by planning for rest periods, giving antiemetics as ordered, and encouraging small meals with high-protein and high-calorie foods.

10. ANSWER A – WBC count is especially important because chemotherapy can cause decreases in WBCs, particularly neutrophils, which leaves the patient vulnerable to infection. The other tests are important in the total management, but less directly specific to chemotherapy.

11. ANSWER C – Giving medications is within the scope of practice for the LPN/LVN. Assisting the patient to brush and floss should be delegated to the nursing assistant. Explaining contraindications is the responsibility of the RN. Recommendations for saliva substitutes should come from the physician or pharmacist.

12. ANSWER A – Ideally, chemotherapy drugs should be given by nurses who have received additional training in how to safely prepare and deliver the drugs and protect themselves from exposure. The other options are a concern but the general principles of drug administration apply.

13. ANSWER A, C, B, D – Tumor lysis syndrome is an emergency of electrolyte imbalances and potential renal failure. A patient scheduled for surgery should be assessed and prepared for surgery. A patient with breakthrough pain needs assessment and the physician may need to be contacted for a change of dose or medication. Anticipatory nausea and vomiting has a psychogenic component that requires
assessment, teaching, reassurance, and antiemetics.

14. ANSWER A – Back pain is an early sign occurring in 95% of patients. The other symptoms are later signs.

15. ANSWER B, C, D, A – Induction is the initial aggressive treatment to destroy leukemia cells. Intensification starts immediately after induction, lasting for several months and targeting persistent, undetected leukemia cells. Consolidation occurs after remission to eliminate any remaining leukemia cells. Maintenance involves lower doses to keep the body free of leukemia cells.

16. ANSWER D – T (tumor) 0-4 signifies tumors increasing size. N (regional lymph nodes) 0-3 signifies increasing involvement of lymph nodes. M (metastasis) 0 signifies no metastasis and 1 signifies distal metastasis.

17. ANSWER B – Potentially life-threatening hypercalcemia can occur in cancers with destruction of bone. Other laboratory values are pertinent for overall patient management but are less specific to bone cancers.

18. ANSWER B, D – Debulking of tumor and laminectomy are palliative procedures. These patients can be placed in the same room. The patient with low neutrophil count and the patient who has had a bone marrow harvest need protective isolation.

19. ANSWER A – Cigarette smoking is associated with 80-90% of lung cancers. Occupational exposure coupled with cigarette smoking increases risks. ETS increases risk by 35%. Cigar smoking provides higher risk than pipe smoking, but both are lower risks than cigarette smoking.

20. ANSWER B – Tumor lysis syndrome can result in severe electrolyte imbalances and potential renal failure. The other laboratory values are important to monitor for general chemotherapy side effects, but are less pertinent to tumor lysis syndrome.

21. ANSWER A, C – After age 18, females should annual Pap smears, regardless of sexual activity. African-American males should begin prostate-specific antigen testing at age 45. Annual mammograms are recommended for women over the age of 40. Annual fecal occult blood testing is recommended starting at age 50.

22. ANSWER B – Hyponatremia is a concern; therefore, fluid restrictions would be ordered. Urinalysis is less pertinent; however, the nurse should monitor for increased urine specific gravity. The diet may need to include sodium supplements. Fluid bolus is unlikely to be ordered for SIADH.

23. ANSWER A, B, D,F – Vital signs and reporting on specific parameters, good hand washing, and gathering equipment are within the scope of duties for an nursing assistant. Assessing for symptoms of infection/superinfections is the responsibility of the RN.

24. ANSWER B – The LPN/LVN is versed in medication administration and able to teach patients standardized information. The other options require more in-depth assessment, planning, and teaching, which should be performed by the RN.