



*(Knowledge for Development)*

**KIBABII UNIVERSITY**

**UNIVERSITY EXAMINATIONS 2022/2023**

**ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER**

**MAIN EXAMINATION**

**FOR BACHELOR OF SCIENCE IN NURSING DEGREE**

**COURSE CODE: NUR 212**

**COURSE TITLE: MEDICAL SURGICAL NURSING 1**

**DATE:** 14/12/2022

**TIME:** 09.00 - 12.00pm

**INSTRUCTIONS TO CANDIDATES**

Answer ALL Section one (1) MULTIPLE CHOICE QUESTIONS and ALL Section two (2) SHORT ANSWER QUESTIONS and any one (1) section THREE (3) LONG ANSWER QUESTION.

TIME: 3 Hours

This paper consists of 9 printed pages. Please Turn Over



**KIBU observes ZERO tolerance to examination cheating**

**SECTION 1 (MULTIPLE CHOICE QUESTIONS) (50 MARKS)**

1. Dr. Jones prescribes albuterol sulfate for a patient with newly diagnosed asthma. When teaching the patient about this drug, the nurse should explain that it may cause:
  - A. Nervousness
  - B. Nasal congestion
  - C. Lethargy
  - D. Hyperkalemia
2. Miriam, a college student with acute rhinitis sees the campus nurse because of excessive nasal drainage. The nurse asks the patient about the color of the drainage. In acute rhinitis, nasal drainage normally is:
  - A. Yellow
  - B. Green
  - C. Clear
  - D. Gray
3. Aminophylline (theophylline) is prescribed for a client with acute bronchitis. A nurse administers the medication, knowing that the primary action of this medication is to:
  - A. Promote expectoration
  - B. Suppress the cough
  - C. Relax smooth muscles of the bronchial airway.
  - D. Prevent infection
4. On auscultation, which finding suggests a right pneumothorax?
  - A. Bilateral inspiratory and expiratory crackles
  - B. Absence of breathe sounds in the right thorax
  - C. Inspiratory wheezes in the right thorax
  - D. Bilateral pleural friction rub
5. A male patient is admitted to the health care facility for treatment of chronic obstructive pulmonary disease. Which nursing diagnosis is most important for this patient?
  - A. Activity intolerance related to fatigue]
  - B. Anxiety related to actual threat to health status
  - C. Risk for infection related to retained secretions
  - D. Impaired gaseous exchange related to airflow obstruction
6. After undergoing a left pneumonectomy, a female patient has a chest tube in place for drainage. When caring for this patient, the nurse must:
  - A. Monitor fluctuations in the water seal chamber
  - B. Clamp the chest tube once every shift
  - C. Encourage coughing and deep breathing
  - D. Drain the chest tube every 2 hours
7. When caring for a male patient who has just had a total laryngectomy, the nurse should plan to:
  - A. Encourage oral feeding as soon as possible
  - B. Develop an alternative communication method
  - C. Keep the tracheostomy cuff fully inflated
  - D. Keep the patient flat in bed
8. Nurse Maureen has assisted a physician with the insertion of a chest tube. The nurse monitors the client and notes fluctuation of the fluid level in the water seal chamber after the tube is inserted. Based on this assessment, which action would be appropriate?
  - A. Inform the physician
  - B. Continue to monitor the patient



- C. Reinforce the occlusive dressing  
D. Encourage client to deep breathe
9. Which of the following foods would the nurse teach the patient with ulcerative colitis to avoid?
- A. Fresh fruits
  - B. White bread
  - C. Sweet desert
  - D. Meat
10. When caring for a patient with metastatic cancer, you note a hemoglobin level of 8.7 g/dL and hematocrit of 26%. You place highest priority on initiating interventions that can reduce?
- A. thirst.
  - B. fatigue.
  - C. headache.
  - D. abdominal pain.
11. A nurse performs an admission assessment on a female client with a diagnosis of tuberculosis. The nurse reviews the result of which diagnosis test that will confirm this diagnosis?
- A. Sputum culture
  - B. Bronchoscopy
  - C. Tuberculin test
  - D. Chest xray
12. A nurse is about to administer albuterol (Ventolin HFA) 2 puffs and budesonide (Pulmicort Turbohaler) 2 puffs by a metered-dose inhaler. The nurse plans to administer by?
- A. Alternating with a single puff each, starting with albuterol
  - B. Albuterol inhaler first then the budesonide
  - C. Alternating with a single puff each, starting with budesonide
  - D. Budesonide inhaler first then the albuterol
13. A nurse instructs a female client to use the pursed-lip method of breathing and the client asks the nurse about the purpose of this type of breathing. The nurse responds, knowing that the primary purpose of pursed-lip breathing is to:
- A. Promote oxygen intake
  - B. Expand the diaphragm
  - C. Strengthen the intercostal muscles
  - D. Promote carbon dioxide elimination
14. A nurse is suctioning fluids from a female client through an endotracheal tube. During the suctioning procedure, the nurse notes on the monitor that the heart rate is decreasing. Which if the following is the appropriate nursing intervention?
- A. Continue the suction
  - B. Notify the physician immediately
  - C. Stop the procedure and re-oxygenate the client
  - D. Ensure the suction is limited to 15 seconds
15. A male adult client is suspected of having a pulmonary embolus. A nurse assesses the client, knowing that which of the following is a common clinical manifestation of pulmonary embolism?
- A. Dyspnea
  - B. Bradypnea
  - C. Bradycardia

- D. Decreased respirations
16. Which of the following best describes pleural effusion?
- A. The collapse of the alveoli
  - B. The collapse of bronchiole
  - C. The fluid in the alveolar space
  - D. The accumulation of fluid between the linings of the pleural space
17. A client with primary TB infection can expect to develop which of the following conditions?
- A. Active TB within 2 weeks
  - B. Active TB within 1 month
  - C. A fever that requires hospitalization
  - D. A positive skin test
18. A pulse oximetry gives what type of information about the client?
- A. Amount of carbon dioxide in the blood
  - B. Amount of oxygen in the blood
  - C. Percentage of hemoglobin carrying oxygen
  - D. Respiratory rate
19. A client with a chronic obstructive pulmonary disease is prescribed with ipratropium (Combivent). Upon a review of the medical history of the client, the nurse questions the prescription if which of the following is noted?
- A. History of smoking
  - B. History of allergy to egg
  - C. History of a previous infection
  - D. History of allergy to egg
20. Which of the following complications is thought to be the most common cause of appendicitis?
- A. Fecalith
  - B. Bowel kinking
  - C. Internal bowel occlusion
  - D. Abdominal bowel swelling
21. Which of the following definitions best describes gastritis?
- A. Erosion of gastric mucosa
  - B. Inflammation of diverticulum
  - C. Inflammation of gastric mucosa
  - D. Reflux of stomach acid into the esophagus
22. When providing teaching for the patient with iron-deficiency anemia who has been prescribed iron supplements, you should include taking the iron with which beverage?
- A. Milk
  - B. Ginger ale
  - C. Orange juice
  - D. Water
23. Which of the following symptoms would a client in the early stages of peritonitis exhibit?
- A. Abdominal distention
  - B. Abdominal pain and rigidity
  - C. Hyperactive bowel sounds
  - D. Right upper quadrant pain
24. The nurse is collecting data on a patient with a ruptured appendix that is painful. Where would the nurse expect the patient's pain to be located?



- A. Right upper quadrant
  - B. Right lower quadrant
  - C. Left upper quadrant
  - D. Left lower quadrant
25. Which of the following assessment findings does the nurse expect for a patient with Emphysema?
- A. Purulent sputum
  - B. Diminished breathe sounds
  - C. Generalized edema
  - D. Dull chest pain
26. When obtaining assessment data from a patient with a microcytic, hypochromic anemia, you question the patient about
- A. folic acid intake.
  - B. dietary intake of iron.
  - C. a history of gastric surgery.
  - D. a history of sickle cell anemia.
27. A male adult patient hospitalized for treatment of a pulmonary embolism develops respiratory alkalosis. Which clinical findings commonly accompany respiratory alkalosis?
- A. Nausea or vomiting
  - B. Abdominal pain or diarrhea
  - C. Hallucinations or tinnitus
  - D. Lightheadedness or paresthesia
28. On auscultation, which finding suggests a right pneumothorax?
- A. Bilateral inspiratory and expiratory crackles
  - B. Absence of breaths sound in the right thorax
  - C. Inspiratory wheezes in the right thorax
  - D. Bilateral pleural friction rub
29. Medical management of the client with diverticulitis should include which of the following treatments?
- A. Reduced fluid intake
  - B. Increased fiber in diet
  - C. Administration of antibiotics
  - D. Exercises to increase intra-abdominal pressure
30. Which of the following symptoms is associated with ulcerative colitis?
- A. Dumping syndrome
  - B. Rectal bleeding
  - C. Soft stools
  - D. Fistulas
31. The primary pathophysiology underlying thalassemia is
- A. erythropoietin deficiency.
  - B. abnormal hemoglobin synthesis.
  - C. autoimmunity.
  - D. S-shaped hemoglobin.
32. Which of the following symptoms would a client in the early stages of peritonitis exhibit?
- A. Abdominal distention
  - B. Abdominal pain and rigidity
  - C. Hyperactive bowel sounds
  - D. Right upper quadrant pain

33. What laboratory finding is the primary diagnostic indicator for pancreatitis?
- A. Elevated blood urea nitrogen (BUN)
  - B. Elevated serum lipase
  - C. Elevated aspartate aminotransferase (AST)
  - D. Increased lactate dehydrogenase (LD)
34. A male patient has a sucking stab wound to the chest. Which action should the nurse take first?
- A. Drawing blood for a hematocrit and hemoglobin level
  - B. Applying a dressing over the wound and taping it on three sides
  - C. Preparing a chest tube insertion tray
  - D. Preparing to start an I.V. line
35. Which of the following definitions best describes gastritis?
- A. Erosion of the gastric mucosa
  - B. Inflammation of a diverticulum
  - C. Inflammation of the gastric mucosa
  - D. Reflux of stomach acid into the esophagus
36. Exercise has which of the following effects on clients with asthma, chronic bronchitis, and emphysema?
- A. It enhances cardiovascular fitness
  - B. It improves respiratory muscle strength
  - C. It reduces the number of acute attacks
  - D. It worsens respiratory function and is discouraged
37. A community health nurse is conducting an educational session with community members regarding tuberculosis. The nurse tells the group that one of the first symptoms associated with tuberculosis is:
- A. Dyspnea
  - B. Chest pain
  - C. A bloody, productive cough
  - D. A cough with the expectoration of mucoid sputum
38. The nurse is caring for a patient who recently underwent tracheostomy. Which of the following nursing goal is most important?
- A. prevention of infection
  - B. relief from pain
  - C. maintenance of a patent airway
  - D. helping him communicate
39. Which of the following mycobacterium does not cause TB?
- A. *M. tuberculosis*
  - B. *M. bovis*
  - C. *M. africanum*
  - D. *M. avium complex*
40. You are caring for a client with a pneumothorax and who has had a chest tube inserted notes continues gentle bubbling in the suction control chamber. What action is appropriate?
- A. Do nothing, because this is an expected finding
  - B. Immediately clamp the chest tube and notify the physician
  - C. Check for an air leak because the bubbling should be intermittent
  - D. Increase the suction pressure so that the bubbling becomes vigorous
41. A patient is complaining of abdominal pain during assessment. What is your priority?
- A. Auscultate to determine changes in bowel sounds.
  - B. Observe the contour of the abdomen



- C. Palpate the abdomen for a mass.
  - D. Percuss the abdomen to determine if fluid is present.
42. In a severely anemic patient, you expect to find
- A. dyspnea and tachycardia.
  - B. cyanosis and pulmonary edema.
  - C. cardiomegaly and pulmonary fibrosis.
  - D. ventricular dysrhythmias and wheezing
43. An appropriate nursing intervention for a patient with the nursing diagnosis of ineffective airway clearance related to thick secretions and fatigue would be to
- A. Perform postural drainage every hour
  - B. Provide analgesics as ordered to promote patient comfort
  - C. Administer oxygen as prescribed to maintain optimal oxygen level
  - D. Teach the patient how to cough effectively to bring secretions to the mouth
44. A 28-year-old man presents with a sudden onset of severe abdominal pain, fever, nausea, and vomiting. The pain is isolated to the right upper quadrant. The patient most likely suffers from:
- A. Appendicitis
  - B. Inflammation of the intestinal lining
  - C. Esophageal varices
  - D. Hypovolemia
45. Potentially life-threatening complications of inflammatory bowel disease include?
- A. Toxic megacolon
  - B. Gastrointestinal bleeding
  - C. Intestinal obstruction
  - D. All the above
46. GERD is a risk factor for the development of:
- A. Celiac disease
  - B. Biliary Atresia
  - C. Barrett's Esophagus
  - D. Inguinal Hernia
47. Which of the following statement is true about CO<sub>2</sub>?
- A. PaCO<sub>2</sub> is determined by minute ventilation
  - B. The difference between ET CO<sub>2</sub> and alveolar CO<sub>2</sub> is determined by diffusion capacity
  - C. PaCO<sub>2</sub> is set to a higher point in patients with COPD because of decreased minute ventilation
  - D. The intercostal muscles are responsible for increases ventilation in response to increased PaCO<sub>2</sub>
48. A nurse teaches a client about the use of a respiratory inhaler. Which action by the client indicated a need for further teaching?
- A. Removes the cap and shakes the inhaler well before use.
  - B. Press the canister down with your finger as he breathes in.
  - C. Inhales the mist and quickly exhales.
  - D. Waits 1 to 2 minutes between puffs if more than one puff has been prescribed
49. Which of the following does NOT happen during inspiration?
- A. The ribs move upward.
  - B. The diaphragm lifts up.
  - C. The antero-posterior dimensions of the chest are increased.
  - D. The transverse dimensions of the thorax are increased.
50. During inspiration, how does alveolar pressure compare to atmospheric pressure?

- A. Alveolar pressure is greater than atmospheric.
- B. Alveolar pressure is less than atmospheric.
- C. Alveolar pressure is the same as atmospheric.
- D. Alveolar pressure is one of the few pressures where the reference pressure is not atmospheric.

**SECTION 2 (SHORT ANSWER QUESTIONS) (30 MARKS)**

***Answer all questions***

1. Outline the nursing interventions and their rationale of a patient with acute appendicitis (5 marks)
2. State five possible nursing diagnoses of a patient diagnosed with ulcerative colitis.(5 marks)
3. Outline the nursing interventions in a patient with atelectasis (5 marks)
4. Explain the medical and nursing management of a patient with hemophilia ( 5 marks)
5. Explain the laboratory tests performed in the diagnosis of acute leukemia ( 5 marks)
6. Describe five types of hernia .( 5 marks)



### SECTION 3 (LONG ANSWER QUESTIONS) (20 MARKS)

#### *Answer one question*

1. A 25-year-old previously well woman presents to your office with complaints of episodic shortness of breath and chest tightness. She has had the symptoms on and off for about 2 years but states that they have worsened lately, occurring two or three times a month. She notes that the symptoms are worse during the spring months. She has no exercise-induced or nocturnal symptoms. The family history is notable for a father with asthma. She is single and works as a secretary in a high-tech firm. She lives with a roommate, who moved in approximately 2 months ago. The roommate has a cat. The patient smokes occasionally when out with friends, drinks socially, and has no history of drug use. Examination is notable for mild end-expiratory wheezing. The history and physical examination are consistent with a diagnosis of asthma. Pulmonary function tests are ordered to confirm the diagnosis.
  - a. State the possible triggers of asthma in this patient? (2marks)
  - b. Describe the early events responsible for the pathogenesis of asthma. How does this result in chronic airway inflammation and airway hyper responsiveness? (4marks)
  - c. Explain the pathophysiologic mechanisms responsible for this patient's symptoms of wheezing, shortness of breath, and chest tightness? (3marks)
  - d. State and explain the expected pulmonary function tests in an asthmatic patient (3mks)
  - e. Using the nursing process, describe the immediate management of a patient with acute asthmatic attack (8marks)
2. Five members of a family with an age range of between 3 years and 41 years present to the casualty department complaining of abdominal discomfort following a meal. On further history taking, each of the family members seems to be complaining of passage of watery stools with tenesmus
  - a. State three (3) common causes of acute gastroenteritis (3 marks)
  - b. Describe the pathophysiology of acute gastroenteritis (5 marks)
  - c. Describe the medical and nursing management of acute gastroenteritis (12 marks)