

FACULTY OF SCIENCE AND TECHNOLOGY

EXAMINATION FOR THE DIPLOMA IN NURSING YEAR 2

SUMMATIVE EXAMINATION (SEMESTER 3)

ACADEMIC SESSION 2012

SND 1210: RESPIRATORY NURSING

JANUARY 2013

TIME: 2 Hours

QUESTIONS

INSTRUCTIONS TO CANDIDATES

This question booklet contains two sections.

Section A

Fifty Multiple Choice Questions (MCQ)

Answer ALL questions in Section A using the multiple choice answer sheet provided.

Section B

One Modified Essay Question (MEQ)

Answer ALL questions in Section B using the answer booklets provided.

At the end of the examination, all the answer booklets, multiple choice answer sheets and the examination booklets will be collected by the invigilator.

[This paper contains FIFTY MCQ and
ONE MEQ question printed on FOURTEEN pages]

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Section A: 30 marks

Answer ALL Multiple Choice Questions.

1. Which of the following pathophysiological mechanisms that occurs in the lung condition, allows pneumonia to develop?

- A Atelectasis
- B Bronchiectasis
- C Effusion
- D Inflammation

2. A 7-year-old child is brought to the emergency room with history of tachypnoeic, respiratory rate of 36 breaths/minute, nonproductive cough and afebrile. He recently had a cold. Which of the following condition does the child have?

- A Acute asthma
- B Bronchial pneumonia
- C Chronic obstructive pulmonary disease (COPD)
- D Emphysema

3. Asthma can be caused by extrinsic and intrinsic factors. Presence of these factors trigger the release of the chemical mediators which does not include:

- A serotonin
- B prostaglandin
- C bradykinin
- D adrenaline

4. A male client with asthma seeks emergency care for acute respiratory distress. As this client is dark skin, the nurse should assess for cyanosis by inspecting the

- A lips
- B nail beds
- C earlobes
- D mucous membranes

5. The purpose of giving corticosteroid therapy to a patient with acute asthma is to
- A expel secretion
 - B reduce inflammation
 - C relax bronchial muscle
 - D prevent respiratory infection
6. Bronchodilator is given to Mr Ali to reduce airway obstruction. Among the nursing actions taken by the nurse is to observe for the side effect of
- A nausea
 - B headache
 - C tachycardia
 - D tachypnea
7. An adult client is admitted for diagnosis and treatment of a left lung lesion. A bronchoscopy was performed under local anesthesia. What nursing action is of highest priority when he returns following the bronchoscopy?
- A Collect all sputum for examination
 - B Assess level of consciousness frequently
 - C Withhold food and fluids until gag reflex has returned
 - D Monitor blood pressure and pulse at 10 minute intervals
8. After thoracentesis the client should be placed on which position?
- A Affected side
 - B Unaffected side
 - C Prone position
 - D Supine position
9. The most important action the nurse should do before and after suctioning a client is
- A placing the client in a supine position
 - B evaluating for clear breath sounds
 - C hyperventilating the client with 100% oxygen
 - D making sure that suctioning takes only 10-15 seconds

10. 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 milk the chest tube every 2 hours

11. An order is written for oxygen by nasal cannula at 2 litres per minute. In assessing the adequacy of the oxygen therapy, which of the following is most effective?

- A Checking the respiratory rate
- B Checking the colour of mucous membranes
- C Measurement of pulmonary functions
- D Measurement of arterial blood gasses

12. For a male client who has a chest tube connected to a closed water-seal drainage system, the nurse should include which action in the plan of care?

- A Stripping the chest tube every hour
- B Keeping the collection chamber at chest level
- C Maintaining continuous bubbling in the water-seal chamber
- D Measuring and documenting the drainage in the collection chamber

13. The nurse is caring for a male client with a chest tube. If the chest drainage system is accidentally disconnected, what should the nurse do?

- A Place the end of the chest tube in a container of sterile saline
- B Apply an occlusive dressing and notify the physician
- C Clamp the chest tube immediately
- D Secure the chest tube with tape

14. A client is on chest tube. A three-way bottle system is used. The nurse expects that the suction bottle will normally have which of the following characteristics.
- A Intermittent bubbling
 - B Continuous bubbling
 - C None of the above
 - D No bubbling
15. The physician is going to remove the chest tube from a client. Which of the following item the nurse don't need to prepare?
- A Sterile gauze
 - B Adhesive tape
 - C Suture removal kit
 - D Empty under water seal bottles
16. In the procedure of chest tube removal, the nurse should instruct the client to do this action while the tube is pulled out.
- A inhale deeply
 - B hold the breath
 - C lie at the abdomen
 - D hyperextend the neck
17. An arterial blood gas (ABG) result shows PaCo₂ more than 50 mmHg. The patient may have
- A hypoxia
 - B hyperoxia
 - C hypercapnia
 - D hyperventilation
18. Mr Ronny sustained a rib fracture. The main assessment on his respiratory status would be
- A respiration rate is low
 - B pain during inspiration
 - C cough has blood stained mucus
 - D paradoxical chest movement

19. To ensure the reading from pulse oxymeter is accurate ,the nurse should
- A place it to the chest
 - B lubricate the clip before use
 - C recharge the mechine after use
 - D examine the intactness of the clip to the skin
20. A diagnosis of pneumonia is typically achieved by which of the following diagnostic tests?
- A ABG analysis
 - B Chest x-ray
 - C Blood cultures
 - D sputum culture and sensitivity
21. During an acute phase, a client with pneumonia is advised to rest in bed to
- A reduce cough
 - B prevent hypoxia
 - C encourage lungs expansion
 - D encourage elimination of secretion
22. Mr. Manan with pneumonia is having thick secretions. The nursing intervention to encourage the elimination of secretion is to
- A maintain good ventilation
 - B advise to take warm water
 - C teach deep breathing exercises
 - D change position every two hours
23. Which of the following nursing actions best promotes adequate gas exchange in a patient with COPD?
- A Administering a sedative as prescribed
 - B Keeping the client in semi-Fowler's position
 - C Encouraging the client to take fluid to maintain hydration
 - D Using a high-flow venturi mask to deliver oxygen as prescribed

24. The nurse identifies nursing diagnosis of altered nutrition less than body requirements for a patient with pneumonia. The suitable nursing intervention is to
- A give patient frozen food
 - B serve fruits alternate with food
 - C serve high calorie and protein diet
 - D give diet that slow the bowel movement
25. The purpose of performing postural drainage is to
- A facilitate equal lungs expansion
 - B give comfort during inspiration and expiration
 - C increase effectiveness of coughing exercise
 - D use gravity to improve mobilization of bronchial secretions
26. Which of the following is not true regarding postural drainage?
- A Each position is held for 30 minutes
 - B It usually performed two or four times daily
 - C It may be use after bronchodilator or mucolytic agents,
 - D It should be discontinued if palpitations, dyspnea or chest pain
27. Which of the following information is the incorrect statement about lung cancer
- A the incidence of adenocarcinoma is rising
 - B passive smoking is responsible for 5% of all lung cancers
 - C the incidence is slightly higher in rural than urban areas
 - D exposure to naturally occurring radioactive is responsible for 5 % of all lung cancers

28. Warning signs and symptoms of lung cancer include persistent cough, bloody sputum, dyspnea, and which of the other following symptoms?
- A Dizziness
 - B Hypotension
 - C Generalized weakness
 - D Recurrent pleural effusion
29. A client has been diagnosed with lung cancer and requires a wedge resection. What area of the lung is removed?
- A One entire lung
 - B A lobe of the lung
 - C A small, localized area near the surface of the lung
 - D A segment of the lung, including a bronchiole and its alveoli
30. The nursing intervention for a child with altered respiration due to thick secretion is to
- A give syrup Mixture expectorant
 - B perform oropharynx suction
 - C give steam inhalation
 - D administer oxygen therapy
31. A client who is exposed to asbestos must see the doctor regularly for a check up. What is the primary reason for them to have frequent checkups?
- A Patients with asbestosis are at high risk for developing bronchogenic cancer
 - B His doctor is monitoring him closely to look for signs of improvement
 - C Patients who use low flow oxygen for long periods are at high risk for developing neurological symptoms
 - D Periodic sputum samples are needed to follow the progress of the disease

32. An emergency room nurse is assessing a male client who has sustained a blunt injury to the chest wall. Which of these signs would indicate the presence of a pneumothorax in this client?
- A A low respiratory rate
 - B A sucking sound at the site of injury
 - C Diminished breath sounds
 - D The presence of a flail chest
33. Which of the following treatments would the nurse expect for a client with a spontaneous pneumothorax?
- A Antibiotics
 - B Bronchodilators
 - C Chest tube placement
 - D Incentive spirometer
34. Following a thoracentesis, which diagnostic test would be best to evaluate for the complication of pneumothorax?
- A Chest x ray
 - B Pulse oximetry
 - C Arterial blood gases
 - D Pulmonary angiography
35. A nurse instructs a female client to use the pursed-lip breathing to
- A promote oxygen intake
 - B strengthen the diaphragm
 - C Promote carbon dioxide elimination
 - D prolong exhalation to slow the breathing rate

36. A female client has just returned to a nursing unit following bronchoscopy. A nurse would implement which of the following nursing interventions
- A Administering medication intravenously
 - B Administering small doses of sedation
 - C Encouraging additional fluids for the next 24 hours
 - D Ensuring the return of the gag reflex before offering food or fluids
37. A nurse teaches a male client about the use of a metered dose inhaler. Which action by the client indicates a need for further teaching?
- A Inhales the mist and quickly exhales
 - B Removes the cap and shakes the inhaler well before use
 - C Presses the canister down with the finger as he breathes in
 - D Waits 1 to 2 minutes between puffs if more than one puff has been prescribed
38. A client's ABG analysis reveals a pH of 7.18, PaCO₂ of 72 mm Hg, PaO₂ of 77 mm Hg, and HCO₃⁻ of 24 mEq/L. What do these values indicate?
- A Metabolic acidosis
 - B Respiratory alkalosis
 - C Metabolic alkalosis
 - D Respiratory acidosis
39. A nurse is teaching a patient with Chronic Obstructive Pulmonary Disease. Which of the following education regarding exercise should the nurse give?
- A Teach purse-lip breathing techniques
 - B Limit exercises based on self-preference
 - C Take breaks every 10-20 minutes with continuous exercises
 - D Encourage repetitive heavy lifting exercises to increase strength

40. During auscultation of a client's chest, the nurse noted there was absence of breath sounds in the lower right lobe. The nurse would anticipate that the bronchus is
- A narrowed by spasm
 - B completely obstructed
 - C partially filled with fluid
 - D partially filled with thick mucus
41. A worried patient asks the nurse what is the advantage of a bronchoscopy. The best response would be that a bronchoscopy
- A allows visualization of both lungs
 - B shows respiratory function in motion
 - C allows the physician to take tissue samples
 - D facilitates the removal of fluid from the bronchi
42. Which of these interventions would be inappropriate in performing a tracheal suction?
- A Administer oxygen prior to procedure.
 - B Limit time to 20 seconds per suction.
 - C Place thumb on the catheter suction control on insertion.
 - D Maintain suction pressure between 80 and 100 mm Hg.
43. The nurse is caring a patient with post left pneumonectomy. The nurse would position the patient on this position to enhance gas exchange.
- A right lateral
 - B left lateral
 - C recumbent
 - D semi-Fowler's
44. A patient with acute bronchitis is being discharged with a prescription for an antimicrobial to be taken for the next 14 days. In the discharge teaching, the nurse will stress on
- A the need for thorough oral hygiene
 - B keeping the fluid intake of 500 mL/day
 - C completing the entire course prescribed
 - D taking the drug on an empty stomach before meals

45. The symptoms of hypoxemia for which the nurse should be alert for a patient with respiratory problem would be
- A cyanosis, nausea, and bradycardia
 - B dyspnea, flushed face, and tachycardia
 - C bradycardia, cyanosis, and restlessness
 - D restlessness, tachycardia, and tachypnea
46. When a patient complains of tachypnea, the nurse explains that the breathing pattern has altered because of the
- A deflated lung tissue results in an altered respiration rate
 - B decreased O₂ level signals the phrenic nerve to alter the respiration rate
 - C brain has become hypoxic and causes an alteration in the respiration rate
 - D increased pH levels stimulate chemoreceptors in the aorta and carotid, which stimulates the phrenic nerve
47. The nurse instructs a patient in deep breathing and coughing exercise. The appropriate sequences are
- I. place the hand on the abdomen to check rise and fall.
 - II. inhale through the nose, pause 1 to 3 seconds, and then exhale.
 - III. assume a high Fowler's position.
 - IV. take 4 to 6 deep breaths.
 - V. cough deeply
- A I,II,IV,V,III
 - B II,III,V,IV,I
 - C III,I,II,IV, V
 - D IV,V,III,II,I
48. A client with pneumonia developed respiratory rate of 35 breath / minute. The first nursing action is to give
- A rest
 - B oxygen
 - C soft diet
 - D antibiotic

49. The nurse is about to perform oral suctioning to a client. The position of a conscious client during suctioning is

- A fowler's
- B supine
- C lateral
- D prone

50. Presence of overdistended and non-functional alveoli is a condition called

- A Bronchitis
- B Emphysema
- C Empyema
- D Atelectasis

END

SECTION B - ESSAY QUESTION (25 MARKS)

QUESTION 1

1. Mr. Laurence, 50 years old, was admitted to the hospital with shortness of breath and found to have a pleural effusion on chest X-ray. Chest tube insertion had been done to reduce the effusion.
 - a) Define pleural effusion (2 Marks)
 - b) List **four (4)** causes of pleural effusion (4 Marks)
 - c) State **four (4)** nursing responsibilities **during** chest tube insertion (8 Marks)
 - d) State **eight (8)** nursing care to a client with chest tube insitu. (8 Marks)
 - e) List **three (3)** complications of chest tube insertion. (3 Marks)

END

