1. The experienced LPN/LVN, under the supervision of the team leader RN, is providing nursing care for a client with a respiratory problem. Which of the following actions are appropriate to the scope of practice for an experienced LPN/LVN? (Choose all that apply.)
   a. Auscultate breath sounds
   b. Administer MDI (multidose inhaler) medications
   c. Complete in-depth admission assessment
   d. Check oxygen saturation using pulse oximetry
   e. Initiate nursing care plan
   f. Evaluate client’s technique for using MDIs

2. You are evaluating and assessing a client diagnosed with chronic emphysema. The client is on oxygen at a flow rate of 5 L/min by nasal cannula. Which finding concerns you immediately?
   a. The client has fine bibasilar crackles.
   b. The client’s respiratory rate is 8 breaths/minute.
   c. The client sits up and leans over the nightstand.
   d. The client has a large barrel chest.

3. The nursing assistant tells you that the client on oxygen at a flow rate of 6 L/min nasal cannula is complaining of nasal passage discomfort. What intervention should you suggest to improve the client’s comfort for this problem?
   a. Suggest that the client’s oxygen be humidified.
   b. Suggest that the client be placed on a simple face mask.
   c. Suggest that the client be provided an extra pillow.
   d. Suggest that the client sit up in a chair at the bedside.

4. You are supervising a student nurse who is performing tracheostomy care for a client. For which action should you intervene?
   a. The student nurse suctions the tracheostomy tube prior to performing tracheostomy care.
   b. The student nurse removes old dressings and cleans off excess secretions.
   c. The student nurse removes the inner cannula and cleans using universal precautions.
   d. The student nurse replaces the inner cannula and cleans the stoma site.
   e. The student nurse changes the soiled tracheostomy ties and secures the tube in place.

5. You are supervising an RN who has pulled from the medical-surgical floor to the emergency department (ED). The nurse is providing care for a client admitted with anterior epistaxis (nosebleed). Which of these directions will you clearly provide to the RN? (Choose all that apply.)
   a. Position the client supine and turned on his side.
   b. Apply direct lateral pressure to the nose for 5 minutes.
   c. Maintain universal body substance precautions.
d. Apply ice or cool compresses to the nose.
e. Instruct the client not to blow the nose for several hours.

6. The client with sleep apnea has a nursing diagnosis of Sleep Deprivation related to disrupted sleep cycle. Which action should you delegate to the nursing assistant?
   a. Discuss weight loss strategies such as diet and exercise with the client.
   b. Teach client how to apply the BiPAP machine before sleeping
   c. Remind client to sleep on the side instead of his back.
   d. Administer modafinil (Provigil) to promote daytime wakefulness.

7. You are acting as preceptor for a new graduate RN during her second week of orientation. For which client(s) would you assign the nursing care to the new RN under your supervision? (Choose all that apply.)
   a. A 38-year-old client with moderate persistent asthma awaiting discharge.
   b. A 63-year-old client with tracheostomy needing trach care every shift
   c. A 56-year-old client with lung cancer just returned from left lower tracheostomy
   d. A 49-year-old client new diagnosis of esophageal cancer

8. You are providing care for a client with recently diagnosed asthma. What key points will you be sure to include in your teaching plan for this client? (Choose all that apply.)
   a. Avoid potential environmental asthma triggers such as smoke.
   b. Use inhaler 30 minutes before exercising to prevent bronchospasm.
   c. Wash all bedding in cold water to reduce and destroy dust mites.
   d. Be sure to get at least 8 hours of rest and sleep every night.
   e. Avoid foods prepared with monosodium glutamate (MSG)

9. You are the team leader RN working with a student nurse. The student nurse is to teach the client how to use a multidose inhaler without a spacer. Put the steps that the student nurse should teach the client in correct order.
   a. Remove the inhaler cap and shake the inhaler.
   b. Open your mouth and place the mouthpiece 1-2 inches away.
   c. Tilt your head back and breathe out fully.
   d. Hold your breathe for at least 10 seconds
   e. Press down firmly on the canister and breathe deeply through your mouth.
   f. Wait at least 1 minute between puffs.

10. The client has chronic obstructive pulmonary disease (COPD). Which intervention for airway management should you delegate to the nursing assistant?
    a. Assist client to sit up on side of bed.
    b. Instruct client to cough effectively.
    c. Teach client to use incentive spirometry.
    d. Auscultate breath sounds every 4 hours.

11. The client with COPD has a nursing diagnosis of Ineffective Breathing Pattern. Which action is appropriate to delegate to the experienced LPN/LVN under your supervision?
a. Observe how well the client performs pursed-lip breathing.

b. Plan a nursing care regimen that gradually increases activity tolerance.

c. Assist the client with basic activities of daily living (ADLs).

d. Consult with physical therapy about reconditioning exercises.

12. The client with COPD tells the nursing assistant that she did not get her annual flu shot this year and has not had a pneumonia vaccination. You will be sure to instruct the nursing assistant to report which of the following?
   a. Blood pressure 152/84
   b. Respiratory rate 27/minute
   c. Heart rate 92/minute
   d. Oral temperature 101.2° F

13. You are responsible for the care of a postoperative client with a thoracotomy. The client has the nursing diagnosis Activity Intolerance. Which action should you delegate to the nursing assistant?
   a. Instruct the client to alternate rest and activity periods.
   b. Encourage monitor, and record nutritional intake.
   c. Monitor cardiorespiratory response to activity.
   d. Plan activities for periods when client has most energy.

14. You are supervising a nursing student who is providing care for a thoracotomy client with a chest tube. What finding will you clearly instruct the nursing student to notify you about immediately?
   a. Chest tube drainage of 10-15 mL per hour
   b. Continuous bubbling in the water seal chamber
   c. Complaints of pain at the chest tube site
   d. Chest tub dressing dated yesterday

15. After change of shift, you are assigned to care for the following clients. Which client should you assess first?
   a. A 68-year-old client on ventilator who needs a sterile sputum specimen sent to the laboratory
   b. A 57-year-old client with COPD and pulse oximetry reading from previous shift of 90% saturation
   c. A 72-year-old client who needs to be started on intravenous antibiotics
   d. A 51-year-old client with asthma complaining of shortness of breath (SOB) after using a bronchodilator inhaler

16. You are initiating a nursing care plan for a client with pneumonia. Which intervention for cough enhancement should you delegate to the inexperienced nursing assistant?
   a. Teach the client about the importance of adequate fluid intake and hydration.
   b. Assist client to sitting position with neck flexed, shoulders relaxed and knees, flexed.
   c. Remind the client to use incentive spirometry every 1-2 hours while awake.
   d. Encourage client to take a deep breath, hold it for 2 seconds, then cough 2-3 times in succession.
17. As the charge nurse, you are making assignments for the next shift. Which client should be assigned to the fairly new nurse (2 months) pulled from the surgical unit to the medical unit?
a. A 58-year-old client on airborne precautions for tuberculosis (TB)
b. A 65-year-old client just returned from bronchoscopy and biopsy
c. A 72-year-old client who needs teaching about use of incentive spirometry
d. A 69-year-old client with COPD who is ventilator-dependent

18. You are preparing a client with TB for discharge. Which statement by the client indicates that additional teaching is required?
a. “All of my family members need to go and see the doctor for tuberculosis testing.”
b. “I will continue to take my isoniazid (INH) until I am feeling completely well.”
c. “I will cover my mouth and nose when I sneeze or cough and put my used tissues in a plastic bag.”
d. “I will change my diet to include more foods rich in iron, protein, and vitamin C.”

19. You are admitting a client with a diagnosis of rule out pulmonary embolus (PE). Client history and assessment reveals all of these findings. Which finding supports the diagnosis of PE?
a. Client was recently in a motor vehicle accident.
b. Client participated in aerobic exercise program for 6 months.
c. Client gave birth to youngest child 1 year ago.
d. Client was on bedrest 6 hours after diagnostic procedure.

20. Which intervention for the client with PE could be delegated to the LPN/LVN on your client care team?
a. Evaluate client’s complaints of chest pain.
b. Monitor lab values for changes in oxygenation.
c. Assess for symptoms of respiratory failure.
d. Auscultate lung sounds for crackles.

21. The client with a PE is receiving anticoagulation with IV heparin. What instructions will you give the nursing assistant who will assist the client with ADLs? (Choose all that apply).
a. Use a lift sheet when moving and positioning the client in bed.
b. Use an electric razor when shaving the client each day.
c. Use a soft-bristled toothbrush or tooth sponge for oral care.
d. Be sure the client’s footwear has firm holes when ambulating.

22. The client with acute respiratory distress syndrome (ARDS) is receiving oxygen by non-rebreather mask, but arterial blood gases still show poor oxygenation. As the nurse responsible for this client’s care, you anticipate which physician’s orders?
a. Endotracheal intubation and mechanical ventilation
b. Immediate application of CPAP to client’s nose and mouth
c. Intravenous furosemide (Lasix) 100 mg IV push stat
d. Call a CODE for respiratory arrest.
23. You are precepting an RN who is orienting to the intensive care unit (ICU). The RN is providing care for a client with ARDS who has just been intubated in preparation for mechanical ventilation. You observe the nurse perform all of these actions. For which action must you intervene immediately?
   a. The RN assesses client for bilateral sounds and symmetrical chest movement.
   b. The RN auscultates over the stomach to rule out esophageal intubation.
   c. The RN marks the tube 1 cm from where it touches the incisor tooth or nares.
   d. The RN orders a chest x-ray to verify that tube placement is correct.

24. You are assigned to provide nursing care for a client receiving mechanical ventilation. Which action should you delegate to the experienced nursing assistant?
   a. Assess the client’s respiratory status every 4 hours.
   b. Take vital signs and pulse oximetry reading every 4 hours.
   c. Check ventilator setting to make sure they are as prescribed.
   d. Observe client’s need for suctioning every 2 hours.

25. The nursing assistant is taking vital signs for the client who is intubated after being suctioned by the respiratory therapist. Which vital sign should she immediately report to you – the RN?
   a. Heart rate 98 beats per minute
   b. Respiratory rate 24 per minute
   c. Blood pressure 168/90
   d. Tympanic temperature 101.4°F

26. You are making a home visit to a 50-year-old client who was discharged from the hospital 2 days ago after being hospitalized for 4 days with a right leg deep vein thrombosis (DVT) and a pulmonary embolism. The client’s only medication is enoxaparin (Lovenox) 80 mg subcutaneously every 12 hours. Which assessment information will you need to communicate to the physician?
   a. The client says she has not been to the lab to have an aPTT done.
   b. The right calf is warm to touch and is larger than the left calf.
   c. The client is unable to remember her husband’s name.
   d. There are multiple ecchymotic areas on the client’s arms.

27. The high pressure alarm on the ventilator rings and, when you go into the room to assess your client with acute respiratory distress syndrome (ARDS), her oxygen saturation monitor reads 87% and she is struggling to sit up. Which action should you take next?
   a. Reassure the client that the ventilator will do the work of breathing for her.
   b. Manually ventilate the client while you assess possible reasons for the high pressure alarm.
   c. Increase an oral airway to prevent the client from biting on the endotracheal tube.
   d. Insert an oral airway to prevent the client from biting on the endotracheal tube.
28. When assessing a 22-year-old client who was admitted 3 days ago with multiple rib fractures and pulmonary contusions after a motor vehicle accident, you find that the client has shallow respirations at a rate of 38. He says he feels “dizzy and scared.” His oxygen saturation is 90% with the oxygen at 6 L/minute per nasal cannula. Which action is most appropriate?
   a. Increases the flow rate on the oxygen to 10 L/minute and reassess the client after about 10 minutes.
   b. Assist the client to use the incentive spirometer and splint his chest using a pillow while he coughs.
   c. Administer the ordered morphine sulfate to the client to decrease his anxiety and reduce the hyperventilation.
   d. Place the client on a non-breather mask at 95%-100% F102 and call the physician to discuss the client’s status.

29. You have just finished the physician with a thoracentesis for a client with recurrent left pleural effusion caused by lung cancer. The physician was able to remove 1800 mL of fluid during the thoracentesis. Which assessment information will be of most concern?
   a. The client cries and states that she cannot go on with treatment much longer.
   b. The client says that she has sharp, stabbing chest pain every time she takes a deep breath.
   c. The client’s blood pressure is 100/48 and her pulse rate is 102 beats per minute.
   d. The client’s dressing at the thoracentesis site has 1 cm of bloody drainage.

30. A 24-year-old client with cystic fibrosis is admitted with increases shortness of breath and possible pneumonia. Which nursing activity is most important to include in the client’s care?
   a. Perform postural drainage and chest physiotherapy every 4 hours.
   b. Discuss client’s feelings about the need for a living will.
   c. Place in private room to decrease the risk of further infection.
   d. Plan activities to allow at least 8 hours of uninterrupted sleep.
RATIONALE
RESPIRATORY PROBLEMS

1. **ANSWER A, B, D** – The experienced LPN/LVN is capable of gathering data and observations including breath sounds and pulse oximetry. Administering medications, such as MDIs, is within the scope of practice for the LPN/LVN. Independently completing the admission assessment, initiating the nursing care plan, and evaluating a client’s abilities require additional education and skills. These actions are within the scope of practice for the professional RN. **Focus:** Delegation/supervision

2. **ANSWER B** – For clients with chronic emphysema, the stimulus to breathe is a low serum oxygen level (normal stimulus is high carbon dioxide level). This client’s oxygen flow is too high and is causing a high oxygen level, resulting in a decreased respiratory rate. If you do not intervene, the client is at risk for a respiratory arrest. Crackles, barrel chest, and sitting up leaning over the night-table are common in clients with chronic emphysema. **Focus:** Prioritization

3. **ANSWER A** – When an oxygen flow rate is greater than 4 L/min, the mucous membranes can be dried out. The best treatment is to add humidification to the oxygen delivery system. Application of water-soluble jelly to the nares can also help decrease mucosal irritation. None of the other options will treat the problem. **Focus:** Prioritization

4. **ANSWER C** – When performing tracheostomy care, a sterile field is set up and sterile technique is used. Standard precautions such as washing hands must also be maintained but are not enough when performing tracheostomy care. The presence of a tracheostomy tube provides direct access to the lungs for organisms, so sterile techniques are used to prevent infections. All of the other steps are correct and appropriate. **Focus:** Delegation/supervision

5. **ANSWER B, C, D, E** – The correct position for a client with an anterior nosebleed is upright and leaning forward to prevent blood from entering the stomach and prevent possible aspiration. All of the other instructions are appropriate according to best practice for emergency care of a client with an anterior nosebleed. **Focus:** Delegation/supervision, assignment

6. **ANSWER C** – The nursing assistant can remind clients about actions that have already been taught by the nurse and are part of the client’s plan of care. Discussing and teaching require additional education and training. These actions fit the scope of practice for the RN. The RN could delegate administration of the medication to the LPN/LVN. **Focus:** Delegation/supervision

7. **ANSWERS A, B** – The new RN is at an early point in her orientation. The most appropriate clients to assign are stable with usual routine care. The client with the lobectomy will require the care of an experienced nurse with frequent assessments and monitoring for postoperative complications. The client admitted with newly diagnosed esophageal cancer will also benefit from an experienced nurse’s care. This client may have questions and needs a comprehensive admission assessment. As the new nurse advances through her orientation, you
will want to work with her providing care for these more complex clients. **Focus:** Assignment, delegation/supervision

8. **ANSWER A, B, D, E** – Bedding should be washed with hot water to destroy dust mites. All of the other points are accurate and appropriate to a teaching plan for a client with a new diagnosis of asthma. **Focus:** Prioritization

9. **ANSWER A, C, B, E, D, F** – Before each use, the cap is removed and the inhaler is shaken according to the instructions on the package insert. Next the client should tilt the head back and breathe out completely. As the client begins to breathe in deeply through his mouth, the canister should be pressed down to release one puff (dose) of the medication. The client should continue to breathe in slowly over 3-5 seconds and then hold his breath for at least 10 seconds to allow the medication to reach deep into the lungs. Clients should wait at least 1 minute between puffs from the inhaler. **Focus:** Prioritization

10. **ANSWER A** – Assisting clients with positioning and activities of daily living are within the educational preparation and scope of practice of the nursing assistant. Teaching, instructing, and assessing clients all require additional education and skills and are more appropriate to the scope of practice of licensed nurses. **Focus:** Delegation/supervision

11. **ANSWER A** – Experienced LPN/LVN can use observation of clients to gather data regarding how well clients perform interventions that have already been taught. Assisting clients with ADLs is more appropriately delegated to the nursing assistant. Planning and consulting require additional education and skills that are appropriate to the RN’s scope of practice. **Focus:** Delegation/supervision

12. **ANSWER D** – The client who did not have the pneumonia vaccination or the flu shot is at increased risk for developing pneumonia or influenza. An elevated temperature indicates some form of infection, which may be respiratory in origin. All of the other vital signs are fairly normal. **Focus:** Delegation/supervision

13. **ANSWER B** – The nursing assistant’s training includes monitoring and recording intake and output. After the nurse has instructed/taught the client about the importance of adequate nutritional intake for energy, the nursing assistant can remind and encourage the client to take in adequate nutrition. Instructing clients and planning activities require more education and skills that are appropriate to the RN’s scope of practice. Monitoring the client’s cardiovascular response to activity is a complex process requiring additional education, training, and skill, appropriate to the RN’s scope of practice. **Focus:** Delegation/supervision

14. **ANSWER B** – Continuous bubbling indicates an air leak that must be identified. With the physician’s order you can apply a padded clamp on the drainage tubing close to the occlusive dressing. If the bubbling stops, the air leak may be at the chest tube insertion, which will require you to notify the physician. If the air bubbling does not stop when you apply the padded clamp, the air leak is between the clamp and the drainage system and you must assess the system carefully to locate the leak. Chest tube drainage of 10-15 ml per hour is acceptable. The chest tube drainage is not changed daily, but may be reinforced. The client’s complaints of pain need to be assessed and treated. This is important but is not as urgent as a chest tube leak. **Focus:** Delegation/supervision
15. **ANSWER D** – The client with asthma did not achieve relief from SOB after using the bronchodilator and is at risk for respiratory complications. This client’s needs are urgent. The other clients need to be assessed as soon as possible but none of them is urgent. COPD clients with pulse oximetry oxygen saturations greater than 90% are acceptable. **Focus:** Prioritization

16. **ANSWER C** – The nursing assistant can remind the client to perform actions that are already part of the plan of care. Assisting the client into the best position to facilitate coughing requires specialized knowledge and understanding that are beyond the scope of the basic nursing assistant. However, an experienced nursing assistant could assist the client with positioning after the nursing assistant and the client had been taught the proper technique. The nursing assistant would still be under the supervision of the RN. Teaching clients about adequate fluid intake and techniques that facilitate coughing requires additional education and skill and is within the scope of the RN. **Focus:** Delegation/supervision

17. **ANSWER C** – Many surgical clients are taught about coughing, deep breathing, and use of incentive spirometry preoperatively. To care for the client with TB on isolation, the nurse must be fitted for a high-efficiency particulate air (HEPA) respirator mask. The bronchoscopy client needs specialized and careful assessment and monitoring after the procedure, and the ventilator-dependent client needs a nurse who is familiar with ventilator care. Both of these clients need experienced nurses. **Focus:** Assignment

18. **ANSWER B** – Clients taking INH must continue the drug for 6 months. The other three statements are accurate and indicate understanding TB. Family members should be tested due to repeated exposure to the client. Covering the nose and mouth and placing tissues in plastic bags help prevent transmission of the causative organism. The dietary changes are recommended for clients with TB. **Focus:** Prioritization

19. **ANSWER A** – Clients who have recently experienced trauma are at risk for DVT (deep vein thrombosis) and PE. None of the other findings are risk factors for PE. Prolonged immobilization is also a risk factor for DVT and PE, but this period of immobilization is very short. **Focus:** Prioritization

20. **ANSWER D** – The LVN/LPN who has been trained to auscultate lung sounds can gather data by routine assessment and observation, under supervision of an RN. Independently evaluating clients and assessing for symptoms of respiratory failure or monitoring and interpreting laboratory values require additional education and skill that are appropriate to the scope of practice for the RN. **Focus:** Delegation/supervision

21. **ANSWER A, B, C, E** – While a client is receiving anticoagulation therapy, it is important to avoid trauma to the rectal tissue that could cause bleeding (e.g., avoid rectal temperature taking and enemas). All of the other instructions are appropriate to the care of a client receiving anticoagulation. **Focus:** Delegation/supervision

22. **ANSWER A** – A non-rebreather mask can deliver up to 95% oxygen. When the client’s oxygenation status does not respond to oxygenation at this high a concentration, this is refractory hypoxemia. Usually at this stage, the client is
working very hard to breathe and may go into respiratory arrest unless intubation and mechanical ventilation are provided to decrease the client’s work of breathing. **Focus:** Prioritization

23. **ANSWER C** – The Endotracheal (ET) tube should be marked at the level where it touches the incisor tooth or nares. This mark is used to verify that the tube has not shifted. The other three actions are appropriate after ET tube placement. The priority at this time is to verify that the tube has been correctly placed. **Focus:** Delegation/supervision, prioritization

24. **ANSWER B** – The nursing assistant’s educational preparation includes taking vital signs, and the experienced nursing assistant would know how to check oxygen saturation by pulse oximetry. Assessing and observing the client, as well as checking ventilator settings, require the additional education and skills of the RN. **Focus:** Delegation/supervision

25. **ANSWER D** – Infections are always a threat for the client using a ventilator, the ET tube bypasses the body’s normal process of filtering air and provides a direct access for bacteria to the lower parts of the respiratory system. **Focus:** Prioritization

26. **ANSWER C** – Confusion in a client this age would be unusual and may be an indication of intracerebral bleeding associated with the enoxaparin use. aPTT testing is not needed for clients receiving fractionated heparin. The right leg symptoms are consistent with a resolving DVT. The presence of ecchymoses may point to a need to do more client teaching about avoiding injury while taking anticoagulants but does not indicate that the physician needs to be called. **Focus:** Prioritization

27. **ANSWER B** – Manual ventilation of the client will allow you to deliver an F1O2 of 100%, while you attempt to determine the cause of the high pressure alarm. The client may need reassurance, suctioning, and/or an oral airway, but the first step should be assessments of the reason for the high pressure alarm and resolution of the hypoxemia. **Focus:** Prioritization

28. **ANSWER D** – The client’s history and symptoms suggest that he may be developing ARDS, which will require intubation and mechanical ventilation. The maximum oxygen delivery with a nasal cannula is an FiO2 of 40%. This is achieved with the O2 flow at 6 L/min, so increasing the flow to 10 L/min will not be helpful. Assisting the client to cough and deep breathe will not improve the lung stiffness that is causing his respiratory distress. Morphine will only decrease the respiratory drive and further contribute to his hypoxemia. **Focus:** Prioritization

29. **ANSWER C** – Removal of large quantities of fluid from the pleural space can cause fluid to shift from the circulation into the pleural space, causing hypotension and tachycardia. The client may need IV fluids to correct this. The other data do indicate that the client needs ongoing monitoring and/or interventions, but none of these findings would be unusual for a client with this diagnosis or after this procedure. **Focus:** Prioritization

30. **ANSWER A** – Airway clearance techniques are critical for clients with cystic fibrosis (CF) and should take priority over the other activities. The client may
need a living will (although life expectancy for clients with CF is approximately 30 years), but discussion about this may be inappropriate at this time. A private room is not usually required. With increased shortness of breath, it will be more important that the client have frequent respiratory treatments than 8 hours of sleep. **Focus:** Prioritization