1. The patient has very shallow, rapid respirations with minimal chest wall motion and slight wheezing in the upper lung fields. Given this situation, what would you expect the arterial carbon dioxide levels to be?

a. Not enough information to determine  
   b. Normal  
   c. Lowered  
   d. Elevated

2. During the history, you learn that the patient was involved in a fall at work and suffered a hip fracture and a head injury. The patient is now presenting with labored breathing at 30/min that has progressively worsened over the last 24 hours, a heart rate of 104, and a blood pressure of 98/70. On auscultation, you hear diffuse rales. The patient denies any complaints of pain other than those related to his recent fall. What is the most likely cause of the patient's respiratory distress?

a. Cardiogenic shock  
   b. Congestive heart failure  
   c. Acute bronchitis  
   d. Adult respiratory distress syndrome

3. Your patient is a 52-year old male complaining of dull, achy chest pains. He is alert & oriented but upon assessment, you notice his skin is pale, cool and clammy. What is your next step?

a. Obtain SAMPLE History  
   b. Apply an AED  
   c. Administer Supplemental Oxygen  
   d. Assist the patient with his wife's nitroglycerin
4. You are dispatched to a residence for a 46-year-old female patient complaining of nausea, vomiting, diarrhea, and abdominal cramping. She states that the onset occurred shortly after eating some cheesecake. Her only medical history is lactose intolerance. Her blood pressure is 136/88 mm Hg. Her radial pulse is 94 beats per minute and her respiratory rate is 18 breaths per minute. She vomited two times prior to your arrival. From what condition is this patient most likely suffering?

a. Gastrointestinal reflux disease
b. Diverticulitis
c. Peptic ulcer disease
d. Acute gastroenteritis

5. Your patient is a 32-year-old male who was complaining of a severe, crushing feeling in the center of his chest and shortness of breath that began while he was mowing his lawn 45 minutes prior to your arrival. He is now only responding to painful stimuli. Presently, his minute ventilation is still adequate, his pulse oximeter reads 95% on room air, and you find his skin to be pale, cool, and diaphoretic. What would be your initial action?

*a. 12-15 liters oxygen by nonrebreather
b. 325 mg aspirin
c. 4-6 liters oxygen by nasal cannula
d. Sublingual nitroglycerin*

6. You are called to a nursing home for a patient with swelling to her legs. Upon arrival, you find a 76-year-old patient sitting in a wheelchair. Assessment confirms pitting edema to both lower legs. You are able to palpate a dorsalis pedal pulse bilaterally. Her skin is warm, pink, and dry. Her lungs are clear bilaterally. Which of the following conditions do you suspect?

a. Deep vein thrombosis
b. Bilateral acute arterial occlusion
c. Atherosclerosis
*sd. Chronic CHF*
7. You are treating a 49-year-old patient who complains of an intense pain between his shoulder blades radiating to his lower back. Pain began 10 minutes prior to your arrival while he was eating and has been constant. He rates the pain as a 10 out of 10. Pain is described as a sharp, tearing pain. He has no significant past medical history. Blood pressure is 130/76 mm Hg in the right arm and 78/48 mm Hg in the left arm, radial pulse in his right arm is 98 beats per minute and regular, and respiratory rate is 20 per minute and non-labored. What condition would you most likely suspect?

a. Myocardial infarction  
   b. Angina pectoris  
   *c. Aortic dissection  
   d. Congestive heart failure

8. You and your partner Fernando are called to a retirement home where one of the residents will not get out of bed. The nurse on call reports that the man has facial droop and arm drift. You arrive on scene to find the man semiconscious and breathing at 16 breaths per minute with good depth. His gaze is fixed on the ceiling and saliva is coming out of his mouth. What would be the best course of action?

a. Suction his mouth and put a nasopharyngeal in  
   b. Suction his nose and put an NRB on him at 15 LPM  
   *c. Suction his mouth and put him on O2 at 15 LPM  
   d. Suction his mouth and nose and do a focused exam

9. You arrive on scene with your partner to a restaurant where a choking was reported. You enter and find an unconscious cyanotic male on the floor. He is supine with BBQ sauce on his mouth and a napkin in his hand. What would you do for this patient?

a. Ask the bystanders what happened, verify no pulse, attach AED, tell everyone to stand back, and hit analyze  
   *b. Head tilt, chin lift, verify apnea and begin Compression. Upon completion of the compressions, give two slow breaths looking for chest rise and fall  
   c. Verify apnea, two slow breaths with high flow O2, and back thrusts  
   d. Abdominal thrusts, finger sweep, and high flow O2
10. You are called to a home where a 91 year old man has had a syncopal episode and is vomiting. The caregiver who called 911 stated that the patient's bowel movements have been bright red since yesterday. The patient has not complained of any pain, but is nauseas. What is most likely wrong with this man and which choice includes appropriate treatment steps?

a. He has pancreatitis and should be given high flow O2 via NRB at 15 LPM. Rapid transport in a left lateral recumbent position while keeping him warm will help avoid shock
b. He has an upper GI bleed and should be transported sitting up with high flow O2 administered via a non rebreather mask at 15 LPM
*c. He has a lower GI bleed and should be given O2 via nasal cannula at 4LPM and transported in a position of comfort while treating for shock
d. He has had a TIA and should be given high flow oxygen via NRB and transported on his effected side to the nearest hospital

11. A 57-year-old obese male patient has been found unresponsive. Ventilating the patient's lungs with a bag-mask device has improved the pulse oximetry up to 88%. Which of the following might continue to improve the pulse oximetry?

a. Adequate inflation of the endotracheal tube cuff
b. Assessing end-tidal CO2 when performing CPR
*c. Ensuring a good mask seal when using a bag-mask device
d. Failure to ventilate between intubation attempts

12. A 27-year-old male patient has been found apneic behind a nightclub. Bystanders suggest that the patient has overdosed on heroin. You are attempting to initially ventilate the patient's lungs using a bag-mask device, but the patient's color fails to improve and there is difficulty squeezing the bag. A common reason for this includes:

*a. Failure to properly tilt the head and lift the chin
b. Forcing the tongue into the throat with high-pressure breathing
c. Overly squeezing the bag and forcing too much air into the patient
d. Pressing too tightly with the bag-mask device on the patient's face
13. A 15-year-old is complaining of pain and pressure in his right ear and the right frontal sinus. He states he just arrived on a flight returning from vacation and, as the aircraft descended, the pain and pressure started. He also states that his hearing is diminished in his right ear. A likely cause for the teenager’s problem is:

a. Basilar skull fracture  
*b. Blocked eustachian tube  
c. Inner ear infection  
d. Right frontal sinus infection

14. You are attempting to intubate an apneic patient. As you pass the tube through the vocal cords, the patient begins to cough. Which of the following changes in the vital signs would be expected with this symptom?

a. Bradycardia, hypertension, and increased ventilation  
*b. Bradycardia, hypotension, and decreased ventilation  
c. Tachycardia, hypotension, and decreased ventilation  
d. Tachycardia, hypotension, and increased ventilation

15. A 4-year-old girl is in respiratory arrest. After opening the airway and ventilating the lungs using a bag-mask device, you notice that there is no chest rise and fall with the bag-mask ventilation. A head tilt/chin lift maneuver is repeated. Which of the following is the next most important step?

*a. Assess for foreign body obstruction.  
b. Assume pneumothorax and perform a needle decompression.  
c. Assume that there is an infectious process and continue to ventilate using the bag-mask device.  
d. Assume that the bag-mask device is defective and should be discarded.

16. You are preparing to intubate a 4-year-old male patient. Upon removing the endotracheal tube from its package, you notice there is no inflatable cuff on the tube. Which of the following explains why this tube does not have a cuff?

a. The pediatric airway collapses and is too small for a cuff.  
*b. The pediatric airway creates a natural seal around the tube.  
c. The pediatric airway is fragile and a cuff may rupture it.  
d. The pediatric airway is too rigid to accommodate a cuff.
17. A 4-year-old boy requires transport to the hospital for evaluation of his autism; his parents tell you he is acting much worse today than normal. He is restless and somewhat combative. You place the child on the gurney and secure several straps across his chest and abdomen to keep him still. Shortly thereafter, the child develops respiratory distress. Which of the following could be contributing to the child's respiratory distress?

a. A supine position may compress the airway because of the size of the head.
*b. One or more straps could be interfering with the child's diaphragm.
c. The combative child's struggling is compromising his airway.
d. The child's accessory muscle of breathing are impaired by the straps

18. A 52-year-old male patient states that he is short of breath and weak. He continues to tell you that blood has been passing in his stools. He has no history of respiratory complaints. He has a respiratory rate of 24 breaths/min and a heart rate of 118 beats/min. Which of the following may be the cause of this patient's weakness and dyspnea?

a. Decreased carbon dioxide
*b. Decreased hemoglobin
c. Decreased ventilation
d. Increased hematocrit

19. A 28-year-old male patient arrives in Denver (elevation 5200 feet) and immediately begins to hike up into the Rocky Mountains. He notes that he quickly became short of breath and has begun breathing rapidly. Which of the following may be a cause of his dyspnea?

a. Decreased partial pressure of carbon monoxide
*b. Decreased partial pressure of oxygen
c. Increased partial pressure of nitrogen
d. Increased partial pressure of oxygen

20. A patient has a pulse oximetry reading of 72%. You notice the patient has some cyanosis of his fingers and toes. He is breathing 24 breaths/min. Which of the following would be the most important action?

a. Assess for external bleeding.
b. Obtain a 12 lead ECG.
c. Place the patient on the cardiac monitor.
*d. Provide supplemental oxygen.
21. A 78-year-old male with a history of severe emphysema has a pulse oximetry of 96%. However, he is breathing 26 breaths/min and is confused and combative. Which of the following would you expect to see from a blood gas reading?

a. Elevated PaCO
*b. Elevated PaCO2
c. Elevated PaN
d. Elevated PaO2

22. On a cross-country flight, a patient begins complaining of shortness of breath. The flight attendant provides supplemental oxygen while the pilot prepares for an emergency landing. While breathing the supplemental oxygen, the patient states that breathing difficulties have subsided. Further, as the aircraft reaches the airport, the patient states that the distress had ended. Which of the following may be causing the respiratory distress?

a. Elevated hemoglobin levels in the patient's blood
*b. Low partial pressure of oxygen in the airplane
c. Low serum potassium levels causing hypoventilation
d. Pulmonary embolism caused by deep vein thrombosis

23. The patient is a 38-year-old woman who fell and broke her left femur. The woman is complaining of severe pain. Her vital signs are blood pressure, 116/70 mm Hg; pulse, 90 beats/min; and respirations, 18 breaths/min. After caring for the woman's injury, you and your team place the woman on the stretcher and in the ambulance. You decide to monitor the patient's pulse oximetry. Although the woman's vital signs remain nearly unchanged, her SpO2 drops from 98 to 92 and her skin becomes slightly pale. Which of the following is the most likely cause for the drop in SpO2?

a. Development of shock lung
*b. Loss of blood because of the fracture
c. Malfunctioning pulse oximeter
d. Severe pain interrupting breathing
24. A 44-year-old male with a long history of type 1 diabetes calls 9-1-1 and complains of shortness of breath. You find the patient sitting upright in a kitchen chair. An assessment reveals a normal blood pressure, elevated pulse, and respirations of 32 breaths/min. There is a sweet odor to the patient's breath. The patient states, "I can't slow my breathing down." Which of the following best explains the reason for the rapid breathing?

a. Anxiety resulting in a hyperventilation syndrome  
b. Elevated fever increasing CO2 production  
c. Metabolic acidosis (diabetic ketoacidosis)  
d. Respiratory depression associated with drug abuse

25. A patient has been found unresponsive by a friend who states that the patient has a problem with heroin abuse. Upon his arrival at the hospital, the patient's blood gas demonstrates a PaCO2 of 90. Which of the following would be a possible cause of this hypercarbia?

a. Hyperventilation  
b. Hypoventilation  
c. Hypoxia  
d. Metabolic acidosis

26. A patient has been complaining of pain and swelling in his right lower leg. He had a sudden onset of shortness of breath. He is tachypneic and dyspneic. Based on your clinical interpretation of his condition, which of the following conditions would you expect?

a. Hypercarbia  
b. Hypocarbia  
c. Hypoventilation  
d. Normal PaO2

27. You are caring for a 58-year-old male patient who has been on a ventilator at home. One of the ventilator settings shows FiO2 = 0.40. What does this indicate?

a. The minimum peak expiratory flow rate is 4 liters per minute.  
b. The percentage of carbon dioxide arterial blood is 40.  
c. The inspired oxygen is set at 40%.  
d. The rate of breathing is set at 40 times per minute.
28. A patient has significant respiratory distress. Upon auscultation, you note increased rales and wheezes. The patient begins to have decreased mental status and respiratory failure. After intubating the patient, what FiO2 setting should be used?

a. 40%
b. 50%
c. 75%
*d. 100%

29. While you are deep suctioning a patient's airway, he begins to cough forcefully. You notice the patient's heart rate has dropped. Which of the following best describes this drop in heart rate?

a. Irritation of the medulla oblongata
b. Release of histamines in the airways
c. Stimulation of the beta-receptors of the lungs
*d. Stimulation of the vagus nerve

30. A 77-year-old male patient has developed a severe cough and fever. He is breathing rapidly. Which of the following is a factor that is responsible for his increased respiratory rate?

*a. Increased carbon dioxide
b. Increased carbon monoxide
c. Increased oxygen
d. Increased partial pressure of nitrogen

31. An Olympic athlete is exercising at maximum capacity. Which of the following best explains the body's response mechanism that causes increased breathing for this athlete?

a. Baroreceptors in the aortic arch detect decreased oxygen.
*b. Chemoreceptors in the carotid arteries detect increased carbon dioxide.
c. The medulla detects decreased oxygen.
d. The pneumotaxic center decreased inhalation.
32. An 88-year-old female patient suffers from COPD. A blood gas reveals that her PaCO2 level is 85. She is mildly dyspneic, but not in acute distress. What would best explain these findings in this patient?

a. The PaCO2 level is normal.
b. The patient is hyponatremic.
*c. The patient's body is working on hypoxic drive.
d. The situation is acute, and the patient's body has not responded yet.

33. A 12-year-old child fell at school. The school nurse called EMS to assess the child and, if needed, transport the child to the hospital. You find minor injuries and vitals signs of BP—112/68 breaths/min; P—90; and R—24 breaths/min. Although the blood pressure and pulse are normal, you consider the rate of breathing to be:

a. Indicative of hyperventilation
b. Suggestive of head injury
c. Too slow for the child's age
*d. Within normal limits

34. A patient in respiratory distress may sit upright, leaning slightly forward. The head may be tilted back with the neck extended, chin projected forward, and mouth open. Which of the following might cause a patient to present in this position?

*a. Lower airway obstruction
b. Malfunction of the medulla
c. Malfunction of the pons
d. Upper airway obstruction

35. A 77-year-old male has difficulty in breathing and cannot lie flat. He states that it is much easier for him to breath when he sits upright. During your examination, he is breathing 24 breaths/min and has rales and rhonchi heard on auscultation. Which of the following causes should you suspect?

a. Asthma
*b. Left ventricular failure
c. Pneumonia
d. Pulmonary embolus
36. A patient has an altered level of consciousness after a head injury. The patient has a breathing pattern in which he speeds up his breathing and then it slows down and almost stops. Which of the following describes this type of breathing?

a. Bradypnea  
*b. Cheyne-Stokes respirations  
c. Hyperpnea  
d. Kussmaul respirations

37. The patient is a 60-year-old woman with a history of congestive heart failure. She called 9-1-1 because of increased trouble breathing. In describing her recent history, she states that she cannot catch her breath unless she is sitting up. Her difficulty breathing is best described as:

a. Arthopnea  
b. Dyspepsia  
*c. Orthopnea  
d. Tachypnea

38. In assessing a patient complaining of trouble breathing, you notice that the patient's anterior-posterior chest diameter seems larger than normal. This condition is more commonly known as:

*a. Barrel chest  
b. Chronic bronchitis  
c. Emphysema  
d. Pulmonary hypertrophy

39. Your patient is 32-year-old construction worker who fell from a ladder. In assessing the patient, you notice totally irregular breathing that varies in rate and depth. Occasionally, you notice periods of apnea. Based on the patient's recent history and the current breathing pattern, what do you suspect?

a. Acute asthma  
b. Diabetic ketoacidosis  
c. Emphysema  
*d. Severe head injury
40. You are caring for a patient in his apartment on the 10th floor. The patient is complaining of chest pain, and you have been administering oxygen via a nonrebreather mask at 15 L/min. You are preparing to move the patient to the ambulance and notice that your E cylinder gauge reads 650 psi. It will take you approximately 10 minutes to move the patient from your current position and load him into the back of the ambulance. You are concerned about the amount of oxygen remaining in the cylinder. What should you do?

a. Change the oxygen delivery device to a nasal cannula at 6 L/min.
b. Promptly transport the patient but do not worry about the remaining oxygen.
c. Reduce the liter flow to 10 L/min to conserve the remaining oxygen.
*d. Take time to change the oxygen cylinder before moving the patient.

41. You are caring for a patient complaining of trouble breathing, and you are providing the patient high-flow oxygen with a nonrebreather mask. The patient's spouse enters the room with a lit cigarette. Which of the following is the most appropriate action?

*a. Ask the spouse to leave the room and extinguish the cigarette.
b. Discontinue the use of oxygen until the spouse leaves the room.
c. Grab the cigarette from the spouse and quickly extinguish it.
d. Use a fire extinguisher to snuff the cigarette and prevent a fire.

42. You are providing supplemental oxygen to a patient. A bystander notices the oxygen cylinder lying next to the patient's bed and stands the tank upright, explaining that it provides better oxygen flow from the tank through the regulator. Which of the following is your next most important action?

a. Agree with and thank the bystander.
*b. Return the cylinder to a flat position for safety.
c. Shake the tank to stir the oxygen to increase flow rate.
d. Use rope or chain to secure the tank to the furniture.

43. A patient with COPD is having difficulty breathing. He has an O2 saturation of 92%. You have a prolonged transport time. Which of the following would be the most appropriate for this patient?

a. Nonrebreather mask
b. Partial rebreather mask
c. Simple face mask
*d. Venturi mask
44. The online medical director suggests up to 90% oxygen to a patient in moderate respiratory distress. Which of the following devices and flow rates would be used to deliver the suggested oxygen percentage?

a. Nasal cannula at 10 L/minute  
b. Nonrebreather at 6 L/minute  
c. Nonrebreather at 15 L/minute  
d. Partial rebreather at 25 L/minute

45. A child has a barking cough and coarse respiratory sounds. She has oxygen saturations of 99%. Which of the following treatments would be appropriate for this patient?

a. Intubate the patient.  
b. Provide humidified oxygen.  
c. Provide morphine sulfate.  
d. Supply oxygen with a nonrebreather.

46. A 48-year-old woman sustained a partial airway obstruction while eating a piece of steak. Her airway is only partially blocked by the meat. Which of the following may develop?

a. Allergic reaction to the foreign body and airway swelling  
b. Drooling and saliva accumulation in the throat  
c. Intact gag reflexes and monitoring for bradycardia  
d. Poor oxygen-carbon dioxide exchange and hypoxia

47. A 34-year-old male patient was eating at a restaurant when, according to bystanders, he began to gasp and was unable to cough. The patient then collapsed and began turning blue. Upon arrival, which of the following is your first course of action?

a. Begin CPR.  
b. Open the airway.  
c. Perform a finger sweep of the oropharynx.  
d. Provide supplemental oxygen.
48. Your patient was choking on a piece of meat. He attempted to cough the meat out, then became silent and turned blue. You and your partner attempted the Heimlich maneuver without any success. The patient is now unresponsive. Which of the following would be an appropriate next action?

*a. Attempt to remove the meat with Magill forceps.  
b. Begin CPR.  
c. Place an oropharyngeal airway.  
d. Provide supplemental oxygen.

49. You are on scene with a 42-year-old male patient who had been choking and is now unresponsive. You have attempted the Heimlich maneuver without success and could not visualize the foreign object with direct laryngoscopy. Which of the following would be the next appropriate action?

*a. Attempt to intubate and push food down into the right mainstem bronchus.  
b. Check for a pulse.  
c. Place a nasal airway.  
d. Provide supplemental oxygen.

50. A 30-year-old male was having dinner at a restaurant with friends while you and your partner were attempting to order food between calls. Suddenly, the man stands up and starts clutching his neck. His friends ask if he is okay, but all he can do is shake his head. Being a responsible paramedic, you volunteer assistance. You suspect that the primary cause of this man's complaint is:

*a. An allergic reaction to the shrimp he was eating  
b. Aspiration of the alcoholic beverage he was drinking  
c. Attempting to swallow a small fish bone  
*d. Complete airway obstruction by a foreign body

51. A 44-year-old woman has a partially obstructed airway from a piece of chicken. She is found awake, alert, and oriented, leaning over the dinner table, as the position affords her the most comfort. Although the woman has adequate air exchange, the airway could become totally obstructed. If the airway becomes obstructed, you can remove the bolus of food by:

*a. Administering the Heimlich maneuver until the airway clears  
b. Giving back blows until the woman coughs up the obstruction  
c. Performing a cricothyroidotomy with a knife or "cric" kit  
d. Visualizing the airway and removing the object with Magill forceps
52. A 30-year-old male patient is found unresponsive in his apartment after a night of partying. The man is exhibiting loud, sonorous respirations suggesting a partial airway obstruction. There is no suggestion of accidental trauma and nothing to indicate a possible neck injury. The best way to manually open the man's airway is to:

*a. Use the head tilt/chin life maneuver  
b. Use the jaw-thrust maneuver  
c. Open the mouth by tugging on the mandible  
d. Open the mouth through the oropharyngeal airway

53. A 16-year-old male was standing on the top of a car when the car suddenly moved. The teen fell from the car and struck his head rendering him unresponsive. The best method for manually opening the teenager's airway is the:

a. Head tilt/chin life maneuver  
b. Head tilt/neck lift maneuver  
*c. Jaw-thrust maneuver  
d. Oropharyngeal airway

54. A patient has suffered a direct blow to the nose and mouth by a baseball. You open the airway, and there is blood in the oropharynx. Which of the following is the most appropriate method to clear the airway?

a. Use the left lateral recumbent position.  
b. Place a nasal airway.  
*c. Suction the upper airway.  
d. Use a bag-mask device to oxygenate the patient.

55. A 24-year-old male patient has overdosed on narcotics and is unresponsive. It appears that he may have vomited and has some remaining stomach contents in his mouth. Which of the following would be an appropriate action?

a. Create an open airway without positioning the head or chin.  
b. Perform a needle decompression.  
c. Remove large obstructions such as a bolus of meat.  
*d. Suction the stomach contents from the mouth.
56. A patient has a tracheostomy tube in place. You are transporting this patient from an extended care facility to the emergency department. It appears that the tracheostomy may be partially obstructed. Which of the following devices or techniques would be the best to remove an obstruction from the tracheostomy tube?

a. Finger sweep  
*b. French catheter attached to suction  
c. Remove the tracheostomy tube and flush with fluid  
d Yankauer suction tip

57. A 44-year-old male patient has shot himself in the mouth. He is still conscious and awake; however, there are copious amounts of blood in his airway. Which of the following would be the next appropriate action?

a. Leave the airway intact.  
b. Remove the blood and tissue with gauze.  
*c. Remove the blood with a suction device.  
d. Provide supplemental oxygen with a bag-mask device.

58. You have just delivered a newborn male and need to suction secretions from the airway. Which of the following best describes the amount of time that suctioning should be done on a newborn?

*a. 3 to 5 seconds  
b. 10 seconds or less  
c. Under 15 seconds  
d. 30 seconds or less

59. You are on scene with a patient who has a tracheostomy tube. The patient has coarse rhonchi with each ventilated breath. There are no apparent wheezes or rales. Which of the following is the next appropriate treatment?

a. Increase the tidal volume on the ventilator.  
b. Inject 10 mL of fluid into the tracheostomy and then suction.  
c. Use a large Yankauer catheter to suction the trach.  
*d. Use a sterile suction catheter to remove secretions and prevent infection of the airway.
60. During the transfer of an intubated patient, you notice that coarse breath sounds are developing. You attempt to suction the trachea for secretions. The suction catheter becomes obstructed. Which of the following best describes the next appropriate action?

a. Change the catheter tip.
*b. Flush the catheter with sterile saline to clear obstruction.
c. Perform a finger sweep.
d. Stop suctioning, and continue to ventilate.

61. While suctioning copious secretions from an intubated patient, you notice that the patient's ECG is showing multiple premature ventricular contractions. The secretions are particularly thick, requiring extensive suctioning to clear the airway and ensure adequate gas exchange. Which of the following is the next appropriate action?

a. Continue suctioning until the airway is clear, then hyperoxygenate.
b. Discontinue suctioning until you reach the emergency department.
c. Ignore the irregular heart rhythm, and continue suctioning the patient.
*d. Stop suctioning, oxygenate the patient, then resume suctioning.

62. A 28-year-old female patient is unresponsive from an unknown medical cause. Verbal and physical stimulation have failed to awaken her. You notice that the patient's airway is partially obstructed by her tongue. After properly positioning the woman's head and chin, you decide to insert an oropharyngeal airway. To determine the proper size airway, you measure from the:

a. Center of the mouth to the larynx
*b. Corner of the mouth to the ear lobe
*c. Middle of the ear to the larynx
d. Tip of the nose to the ear lobe

63. A patient has sustained a closed head injury with significant nasal bleeding. A jaw thrust maneuver has been performed to open the airway. The patient has an intact gag reflex. Which of the following is the next most appropriate action?

a. Insert a nasopharyngeal airway.
b. Insert a size 0 oropharyngeal airway.
*c. Suction secretions/blood from airway.
d. Supply supplemental oxygen by a bag-mask device.
64. A patient who is conscious has a severe nosebleed. You are having difficulty maintaining the airway. Which of the following might help keep the airway patent?

a. Nasal airway
b. Nose plug
c. Oral airway
*d. Suctioning

65. After ensuring that the patient's airway is open and inserting an oropharyngeal airway, you use a bag-mask device to ventilate the patient. You notice that with each breath, the patient's chest rises minimally, but the abdomen is getting larger. Which action will help to prevent this problem in the future?

*a. Performing cricoid pressure
b. Providing pressure to the midabdominal region
c. Providing slower ventilations with the bag-mask device
d. Providing ventilations with a larger volume

66. After ventilating a patient's lungs by using a bag-mask device, you notice that the patient's abdomen has enlarged because the patient's stomach has filled with air. Which of the following complications should you anticipate?

a. Belching noxious gases
b. Decreasing blood pressure
c. Increasing heart rate
*d. Vomiting and aspiration

67. When using a bag-mask device on room air, the paramedic will provide the patient with an oxygen concentration of approximately 21%. By adding a reservoir and supplemental oxygen to the bag-mask device at a flow rate of 15 L/min, the paramedic can deliver an oxygen concentration of:

a. 60% to 80%
b. 75% to 100%
c. 80% to 90%
*d. 90% to 100%
68. While ventilating the lungs of a nonbreathing, medical patient with a bag-mask device, you notice that the patient's chest is not rising adequately, and there is a low pulse oximetry, suggesting that the patient is not oxygenating adequately. What do you suspect?

a. Airway obstruction caused by the patient's tongue  
*b. An inadequate tidal volume with each breath  
c. Tension pneumothorax with increased dead space  
d. The mask size is too small for the patient

69. You are using a bag-mask device to ventilate the lungs of a 4 year old. You are using an adult bag on this child. Which of the following must be done to prevent injury?

a. Squeeze the bag-mask device forcefully for each ventilation.  
b. Use a lower oxygen level.  
c. Use a simple mask instead of a bag-mask device.  
*d. Use smaller tidal volumes to prevent gastric distension.

70. You arrive on scene and begin to ventilate an unresponsive 44-year-old female patient. Your partner is starting an IV. A medical first responder (MFR) arrives. Which of the following tasks will you assign the MFR for optimal patient care?

a. The MFR should flag additional units to this location.  
b. The MFR should hang crystalloid fluids.  
c. The MFR should open the drug box.  
*d. The MFR should use his two hands to apply gentle pressure to the bag-mask device.

71. You are ventilating the lungs of an adult patient, and your partner is applying cricoid pressure. The patient makes a retching sound as though he might vomit. Which of the following should be done to avoid injury?

a. Increase the downward pressure to prevent aspiration of gastric contents.  
b. Move the cartilage laterally in the neck to reduce the tendency to vomit.  
*c. Release the pressure on the cricoid cartilage to prevent gastric rupture.  
d. Suction the airway while maintaining pressure on the cricoid cartilage.
72. A 24-year-old male patient is in respiratory failure as a result of asthma. You have attempted multiple medical routes to manage his distress, and you determine that he requires intubation. Which of the following is the most appropriate device to ventilate this patient for the transport?

a. Automatic transport ventilator  
*b. Bag-mask device  
c. Nasal cannula  
d. Simple mask

73. A 46-year-old male patient sustained multiple chest injuries in a blast accident at a manufacturing plant. He is not breathing and needs assisted ventilation over a prolonged transport to a trauma center. Which of the following is an accurate statement?

a. Alternate between an automatic transport ventilator and bag-mask device.  
b. An automatic transport ventilator should be used.  
*c. Intubate the patient, then ventilate the patient with a bag-mask device.  
d. Use an automatic transport ventilator with low-flow oxygen.

74. A patient has a tracheostomy. You attempt to ventilate the patient's lungs through the tracheostomy tube. Air appears to leak from the nose and mouth. Which of the following is an appropriate action?

a. Change the tidal volume.  
*b. Close and seal the nose and mouth.  
c. Inflate the balloon with more air.  
d. Remove the tracheostomy.

75. A 68-year-old male with a history of throat cancer had his larynx removed. To breathe, the patient has a permanent tracheostomy tube. The procedure of removing the larynx is known as:

a. Cricothyreotomy  
b. Cricothyrotomy  
*c. Laryngectomy  
d. Laryngoscopy
76. A patient has a tracheostomy tube. The patient continually coughs, and there appears to be an obstruction of the tracheostomy tube. Which of the following rationales best explains why this occurs?

*a. The air bypasses the nose and mouth.
b. The air has a shorter transport to the lungs.
c. The material of the tracheostomy tube absorbs the humidity.
d. There is too much humidified air in the trachea.

77. The patient is a 62-year-old woman involved in a motor vehicle crash. You note that the woman is in obvious respiratory distress. In assessing the patient, you also note that the patient has a stoma because of a laryngectomy several years earlier. What should you do to assist the woman's breathing?

*a. Insert an endotracheal tube into the stoma and ventilate.
b. Perform nasotracheal intubation and ventilate thought the tube.
c. Use an adult bag-mask device over the patient's mouth and nose.
d. Use an adult-sized mask and ventilate through the stoma.

78. You are called to care for a 77-year-old female patient in respiratory distress. During the patient assessment, you note that the patient has a tracheostomy tube inserted into a permanent tracheostomy. The tube has become dislodged. Which of the following should be your next action?

*a. Attempt to replace the tracheostomy tube or intubate if necessary.
b. Immediately perform nasotracheal intubation to secure an open airway.
c. Insert a nasogastric tube to reduce swelling and make breathing easier.
d. Reinsert the tracheostomy tube.

79. You are called to the home of a 5-year-old boy who has a tracheotomy tube and is on a ventilator. The patient's mother called because she could not suction the tracheotomy tube adequately and the patient's oxygen saturation is dropping. The mother states that the patient has been ill for the past 2 days with a fever, congested lungs, and copious amounts of thick, green-tinged mucus. You attempt to suction the tracheotomy tube with no results. What is your best course of action at this point?

*a. Perform a translaryngeal cannulation.
b. Rapidly transport the patient.
c. Remove the tracheotomy tube, and replace it with a new one.
d. Ventilate the patient with a bag-mask device.
80. A patient is intubated and the lungs are being manually ventilated by a bag-mask device. The tidal volume is too high. Which of the following would you expect to occur?

a. Atelectatic pneumonia and ventilatory compromise  
b. Hyperventilation syndrome and hypercarbia  
*c. Pressure on the diaphragm and resistance to ventilation  
d. Stimulation of the vagus nerve and risk of bradycardia

81. A patient has been intubated, and the lungs are being ventilated. The abdomen is very firm and distended. Which of the following would the most appropriate treatment for this patient?

a. Esophageal intubation and suctioning  
b. Fine needle aspiration of the stomach  
c. Nasotracheal intubation and suctioning  
*d. Orogastric or nasogastric suctioning

82. A patient was eating dinner at a restaurant. He began having a severe asthma attack and went into respiratory distress. Following intubation, which of the following would be the most appropriate intervention for this patient?

a. Nasotracheal suctioning  
b. Needle decompression of the stomach  
*c. Orogastic tube  
d. Oropharyngeal airway

83. You have placed a nasogastric tube in a patient with obvious gastric distention. The patient has no facial injuries or other trauma. After inserting the nasogastric tube, there is no appreciable reduction in gastric distention, even though air flows freely through the tube. A likely reason for the problem is:

a. Excessive depth of tube placement  
b. Kinking of the nasogastric tube  
c. The tube has an open whistle tip  
*d. The tube has been misplaced in the trachea
84. While assessing the nonbreathing patient, you note significant gastric distention and determines that a nasogastric tube is appropriate. In preparing the equipment for the procedure, you are told that the patient has a history of alcoholism and suffers from esophageal varices. What should you do?

*a. Defer nasogastric tube insertion until you arrive at the emergency department.
b. Ignore the patient's past medical history, and insert the nasogastric tube.
c. Insert the nasogastric tube, and prepare to vigorously suction the upper airways.
d. Prepare to insert an orogastric tube rather than a nasogastric tube.

85. A patient has sustained significant facial trauma and is bleeding. While preparing to intubate this patient, which of the following should be worn for personal protection equipment?

a. Gloves and shoe coverings
*b. Gloves, eye shield, and a gown if available
b. Gloves, gown, and shoe coverings
d. Gloves only

86. A 21-year-old male patient has been struck in the neck several times with a metal baseball bat during a gang-related fight. As you assess the patient, you hear stridor with each breath. Appropriate management for this patient includes:

a. Early Combitube or LMA placement to protect the airway
*b. Early intubation to protect the airway
b. Supplement oxygen with a nasal cannula
d. Supplemental oxygen with a simple face mask

87. You are caring for a newly born infant who is not breathing adequately. Although the newborn is positioned properly, the neonatal-sized bag-mask device is not providing adequate tidal volume to provide effective ventilation. Which of the following is the next most appropriate step?

*a. Change to a larger sized bag-mask device, and monitor ventilation.
b. Continue attempts to ventilate the newborn using the neonatal equipment.
c. Insert a neonatal gastric tube, and continue ventilation attempts.
d. Pad the bridge of the nose to ensure an adequate or better mask seal.
88. Following the emergency delivery of a term infant, assisted ventilations are required. Which of the following best describes how this should be accomplished?

*a. Use a neonatal bag-mask device.  
b. Use a nonrebreather.  
c. Use a pediatric bag-mask device.  
d. Use an adult bag-mask device.

89. Choose the correct statement pertaining to a major difference between endotracheal intubation and the use of other advanced airways such as the Combitube, LMA, or King airway.

a. Endotracheal intubation does not permit suctioning of the lower airways.  
b. Endotracheal intubation does not require visualization of the vocal cords.  
c. The other airways can be used on all and any patient group.  
*d. The other airways do not require visualization of the vocal cords for insertion.

90. A patient is in respiratory failure. Using the laryngoscope, you attempt to visualize the vocal cords with no success. Your partner attempts with no success. Which of the following would be an appropriate action at this time?

*a. Insert the endotracheal tube blindly.  
b. Perform a head tilt/chin lift maneuver.  
c. Perform a tracheostomy.  
*d. Utilize a dual lumen airway.

91. The patient is a 37-year-old male who is not breathing. In maintaining the man's airway, you note a strong gag reflex when an oropharyngeal airway is introduced. What should you do in this situation?

*a. Insert a Combitube to maintain the airway and assist ventilation.  
b. Insert an orogastric tube, and then use any appropriate airway device.  
c. Use a head/tilt chin lift maneuver to maintain the airway and assist breathing.  
d. Use an LMA to maintain the airway and assist ventilation.
92. A patient has ingested hydrochloric acid. You would like to secure the airway. Which of the following is the most appropriate method?

a. Bag-mask device with supplemental oxygen  
b. Combitube  
c. Endotracheal tube  
d. Laryngeal mask airway  

93. You have finished inserting a Combitube into an unresponsive, nonbreathing adult female. When attempting to inflate the cuff, you notice that the cuff fails to remain inflated. What should you do next?

a. Continue to inflate the cuff.  
b. Increase the tidal volume of each ventilation.  
c. Remove device and inspect cuff.  
d. Ventilate the patient's lungs.  

94. You are considering using the LMA to manage the patient's airway. After inserting the airway, the patient begins to gag. What should you do next?

a. Continue ventilating the patient, as the LMA is a secure airway.  
b. Provide suction through the LMA.  
c. Remove the LMA, and ventilate the patient with a bag-mask device.  
d. Reposition the LMA.  

95. You place a Combitube on a 27-year-old male patient in cardiac arrest. After ventilating through the number 1 port, you hear breath sounds. What should you do?

a. Pull the tube back approximately 1 to 2 cm.  
b. Remove the tube and ventilate the patient.  
c. Secure the tube and ventilate through the number 1 port.  
d. Secure the tube and ventilate through the number 2 port.  

96. A 44-year-old female patient is in respiratory distress after being struck in the face with a baseball bat. The patient has an oxygen saturation of 72%. Which of the following airway maneuvers is the most appropriate?

a. Insert a dual lumen airway.  
b. Insert an endotracheal tube.  
c. Insert an oropharyngeal airway.  
d. Use a nasopharyngeal airway.
97. A 48-year-old female patient presents in respiratory failure following an exposure to toxic fumes. She is breathing four times per minute and she appears to be gasping for each breath. Which of the following devices should be used?

a. Bag-mask device ventilation
*b. Endotracheal intubation
 c. Inserting the LMA
d. Using the Combitube

98. A 78-year-old female patient with an altered mental status and copious secretions has begun coughing and experiencing respiratory distress, which quickly leads to apnea. Which of the following personal protection equipment is appropriate for this scenario?

a. Gloves and face shield only
b. Gloves, face shield, shoe covers
*c. Gloves, goggles, and face shield
d. Gloves, goggles, and shoe covers

99. A 46-year-old male patient is seated at the table and leaning over his dinner plate in a family restaurant. As you approach, the man's wife states, "He took a large bite of steak then started coughing. He's breathing, but we think something's stuck." The man is sitting motionless, but he is breathing, conscious, and able to answer questions. He acknowledges that a piece of meat is stuck in his throat. Which of the following is the most appropriate intervention at this time?

a. Abdominal thrust maneuver to clear the food
b. Direct laryngoscopy to remove the food
*c. Monitor patient and supply supplemental oxygen
d. Orotracheal intubation for airway control

100. A 15-year-old male patient is unresponsive after choking at the dinner table. Abdominal thrusts have not cleared the airway. What equipment is appropriate to use next?

a. Laryngoscope and large diameter endotracheal tube
*b. Laryngoscope and Magill forceps
c. Laryngoscope and suction catheter
d. Scalpel and large surgical cricothyrotomy needle
101. A 79-year-old male patient is unresponsive and apneic on his dining room floor. You attempt to ventilate the patient's lungs with a bag-mask device. There is no chest rise. Following the head/tilt chin lift for the second time, there is still no chest rise. What is your next step?

*a. Perform chest compressions.
b. Perform surgical cricothyroidotomy.
c. Place a dual lumen airway.
d. Use Magill forceps to remove the foreign body.

102. You are performing direct laryngoscopy on a still-breathing 70-year-old female patient in respiratory failure caused by COPD. As you introduce the laryngoscope into the patient's mouth, she begins to gag and nearly vomits. Because maintaining the airway and ventilation is critical in this patient, you should:

a. Ignore the vomiting and continue  
*b. Perform nasotracheal intubation  
c. Resort to bag-mask-device ventilation  
d. Suction the oropharynx and continue

103. You have a patient that requires intubation. The epiglottis is soft and floppy. Which of the following would be the most appropriate airway maneuver?

a. Dual lumen airway  
b. The Macintosh blade in the vallecula  
c. The Macintosh blade over the epiglottis  
*d. The miller blade to lift the epiglottis

104. You are using an esophageal detection device to verify endotracheal tube placement. After squeezing the bulb, attaching it to the endotracheal tube, and releasing the bulb, you note that the bulb does not reinflate. Which of the following should you assume?

*a. The endotracheal tube is in the esophagus.  
b. The endotracheal tube is in the mainstem bronchus.  
c. The endotracheal tube is in the trachea.  
d. The endotracheal tube is positioned in the carina.
105. Lung sounds are heard after intubation only over the right lung of an adult patient. The 7.0id ET tube is at 27 cm at the teeth. The most likely explanation for the findings in the intubation scenario is:

a. Left-sided pneumothorax  
b. Occlusion of the endotracheal tube  
c. Right mainstem intubation  
d. Right-sided hypertympany

106. After placing an endotracheal tube, you cannot hear any lung sounds but you hear gurgling over the epigastrium. The endotracheal tube is most likely placed in the:

*a. Esophagus  
b. Left mainstem  
c. Right mainstem  
d. Trachea

107. A 44-year-old male patient has been intubated following experiencing respiratory failure caused by asthma. Which of the following is an appropriate step for packaging this patient?

a. Elevating the patient's head to facilitate ventilation  
b. Placing the patient in a left lateral recumbent position  
c. Using a cervical collar to reduce head movement  
d. Using a KED or spine board to immobilize the spine

108. A 10-year-old in respiratory failure from asthma has been intubated with the tube placed at a depth of 30 cm. What is the next most appropriate action?

a. Begin ventilating the patient; this is the appropriate depth.  
b. Pull the tube back to 17 cm and begin ventilating.  
c. Push the tube in 2 cm farther.  
d. Remove tube and reintubate.

109. A patient is apneic and requires a method for securing the airway. Which of the following is the most appropriate equipment for this patient on the first attempt?

a. Bag-mask device and oropharyngeal airway  
b. Dual lumen airway  
c. Endotracheal tube with laryngoscope  
d. Nasotracheal tube
110. You are caring for an unresponsive 45-year-old female patient who is in respiratory arrest and is trapped in a narrow, confined space. Extrication from the confined space is expected to take some time. You determine that the patient's airway is best managed by intubation. Direct visualization of the airway is difficult if not impossible. Which of the following techniques would be an appropriate first choice?

- a. Continue with a bag-mask device.
- b. Create a surgical airway.
- c. Perform blind digital intubation.
- d. Perform nasotracheal intubation.

111. A 22-year-old male patient is in status epilepticus. The usual means to terminate the seizure have failed, and the patient is rapidly becoming hypoxic. Intubation is appropriate; however, the seizure activity has clenched the patient's jaw. Which of the following is the next best method for securing the airway?

- a. Digital intubation with transillumination technique
- b. Nasotracheal intubation with transillumination
- c. Opening the airway with a cricothyrotomy
- d. Rapid sequence intubation to secure the airway

112. A patient has suffered a significant head injury and is highly combative. While preparing to intubate this patient, which of the following medications should be administered first?

- a. A paralytic
- b. A sedative
- c. Atropine
- d. Lidocaine

113. The patient has been sedated and paralyzed in preparation for rapid sequence intubation. After the procedure, you notice that the sedative has worn off. What should you do next?

- a. Administer additional paralytic.
- b. Administer additional sedative.
- c. Calm and reassure the patient.
- d. Continue with airway control.
114. After administering a sedative and paralytic, you attempt to pass the endotracheal tube. Unfortunately, it is not possible to insert the tube. After 45 to 60 seconds, what should you do?

a. Continue the attempts, as the patient needs the airway.
b. Invite your assistant to attempt endotracheal intubation.
*c. Remove the airway, reoxygenate, and attempt intubation again.
d. Suction the airway as the attempt to intubate continues.

115. You are about to electively intubate a 35-year-old female patient experiencing a severe asthma attack. This may be a difficult airway. Which of the following would be the most appropriate for this patient?

*a. Fentanyl
b. Pancuronium
c. Thiopental
d. Vecuronium

116. A 22-year-old female unrestrained driver has sustained significant face and neck injuries after her car collides head on into a tree. Her neck is swollen and distended because of bleeding into the soft tissues. Endotracheal intubation is nearly impossible. Choose the correct statement about creating an airway with a surgical cricothyrotomy.

a. It is a viable option, because endotracheal intubation is not possible.
*b. It is contraindicated in patients with underlying trauma to the neck.
c. It is indicated only after a needle cricothyrotomy has been done.
d. It is permissible only after nasotracheal intubation has failed.

117. After performing a surgical cricothyrotomy, you notice swelling of the soft tissues in the neck accompanied by what appears to be a large hematoma along with subcutaneous emphysemas. What should you do next?

a. Anticipate that this is a normal effect of the procedure, and continue care.
*b. Check the position of the cricothyrotomy tube, and replace if needed.
c. Insert the cricothyrotomy tube deeper into the patient's airway.
d. Perform endotracheal or nasotracheal intubation as soon as possible.
118. A 22-year-old male patient has fallen 35 feet from an open window and has a GCS score of 2, 2, 2 for a total of 6. You have determined that intubation is necessary; however, his airway is very difficult to navigate because of fractures and bleeding. To consider a surgical airway, what equipment is needed?

a. Endotracheal tube, 9 mm  
b. Jet insufflation device  
*c. Scalpel, no. 10 or 15  
d. Sterile nylon sutures

119. You have created an airway using a surgical cricothyrotomy. What should follow the insertion of the endotracheal or tracheostomy tube and verifying tube placement?

*a. Secure the tube, and frequently assess ETCO2, adequate ventilation, and ECG.  
b. Secure the tube, and inflate the cuff with at least 10 mL of air.  
c. Secure the tube, and make sure that the EMT adequately ventilates the patient.  
d. Secure the tube with sutures, and continue to monitor for ventilation.

120. A patient is being intubated using rapid sequence intubation. Which of the following medications will paralyze the patient?

a. Etomidate  
b. Ketamine  
*c. Succinylcholine  
d. Thiopental