

PRACTICE EXAM 6: NBRC TMC SIMULATION (140 QUESTIONS)

This practice exam contains 140 scored-style questions and is designed for a three-hour testing session. Select the single best answer for each question. The actual NBRC TMC examination administered through December 31, 2026 contains 160 items, including 140 scored items and 20 unscored pretest items, and uses separate low- and high-cut scores.

1. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes recurrent obstructive events with continued respiratory effort. What is the best next conclusion or response?

- A. normal sleep architecture
- B. isolated nocturnal hypoventilation
- C. obstructive sleep apnea
- D. central sleep apnea

2. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with grunting, retractions, and diffuse ground-glass opacities in a premature infant. Which interpretation or action is most appropriate?

- A. transient tachypnea without distress
- B. meconium aspiration in a term infant
- C. congenital diaphragmatic hernia
- D. neonatal respiratory distress syndrome

3. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes grunting, retractions, and diffuse ground-glass opacities in a premature infant. What is the best next conclusion or response?

- A. neonatal respiratory distress syndrome
- B. meconium aspiration in a term infant
- C. congenital diaphragmatic hernia
- D. transient tachypnea without distress

4. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with barking cough and inspiratory stridor in a toddler. Which interpretation or action is most appropriate?

- A. bronchiolitis
- B. croup
- C. epiglottitis with drooling
- D. foreign-body aspiration with unilateral wheeze

5. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes barking cough and inspiratory stridor in a toddler. What is the best next conclusion or response?

- A. epiglottitis with drooling
- B. foreign-body aspiration with unilateral wheeze
- C. bronchiolitis
- D. croup

6. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with wheezing and crackles after an upper respiratory infection in an infant. Which interpretation or action is most appropriate?

- A. croup
- B. bacterial tracheitis
- C. bronchiolitis
- D. isolated pleural effusion

7. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes wheezing and crackles after an upper respiratory infection in an infant. What is the best next conclusion or response?

- A. bronchiolitis
- B. bacterial tracheitis
- C. isolated pleural effusion
- D. croup

8. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with pH 7.28, PaCO₂ 58 mm Hg, and HCO₃⁻ 26 mEq/L. Which interpretation or action is most appropriate?

- A. acute respiratory alkalosis
- B. acute respiratory acidosis
- C. metabolic acidosis
- D. fully compensated respiratory acidosis

9. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes pH 7.28, PaCO₂ 58 mm Hg, and HCO₃⁻ 26 mEq/L. What is the best next conclusion or response?

- A. metabolic acidosis
- B. fully compensated respiratory acidosis
- C. acute respiratory alkalosis
- D. acute respiratory acidosis

10. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with pH 7.49, PaCO₂ 29 mm Hg, and HCO₃⁻ 23 mEq/L. Which interpretation or action is most appropriate?

- A. metabolic alkalosis

- B. acute respiratory alkalosis
- C. compensated respiratory acidosis
- D. mixed respiratory and metabolic acidosis

11. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes pH 7.49, PaCO₂ 29 mm Hg, and HCO₃⁻ 23 mEq/L. What is the best next conclusion or response?

- A. acute respiratory alkalosis
- B. compensated respiratory acidosis
- C. mixed respiratory and metabolic acidosis
- D. metabolic alkalosis

12. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with PaO₂ 55 mm Hg while breathing room air. Which interpretation or action is most appropriate?

- A. normal age-related oxygenation
- B. isolated ventilatory failure
- C. clinically important hypoxemia
- D. laboratory analyzer contamination

13. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes PaO₂ 55 mm Hg while breathing room air. What is the best next conclusion or response?

- A. clinically important hypoxemia
- B. isolated ventilatory failure
- C. laboratory analyzer contamination
- D. normal age-related oxygenation

14. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with headache after a house fire with a normal pulse oximeter reading. Which interpretation or action is most appropriate?

- A. repeat standard pulse oximetry
- B. obtain CO-oximetry
- C. perform peak expiratory flow
- D. measure serum bicarbonate only

15. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes headache after a house fire with a normal pulse oximeter reading. What is the best next conclusion or response?

- A. perform peak expiratory flow
- B. measure serum bicarbonate only
- C. repeat standard pulse oximetry
- D. obtain CO-oximetry

16. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with cyanosis that does not improve with oxygen and an SpO₂ near 85%. Which interpretation or action is most appropriate?

- A. increase PEEP immediately
- B. obtain a sputum Gram stain
- C. measure methemoglobin by CO-oximetry
- D. perform a methacholine challenge

17. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes cyanosis that does not improve with oxygen and an SpO₂ near 85%. What is the best next conclusion or response?

- A. obtain a sputum Gram stain

- B. measure methemoglobin by CO-oximetry
- C. perform a methacholine challenge
- D. increase PEEP immediately

18. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a reduced FEV1/FVC ratio with a low FEV1. Which interpretation or action is most appropriate?

- A. obstructive ventilatory defect
- B. restrictive defect confirmed
- C. normal ventilatory mechanics
- D. isolated diffusion impairment

19. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a reduced FEV1/FVC ratio with a low FEV1. What is the best next conclusion or response?

- A. normal ventilatory mechanics
- B. isolated diffusion impairment
- C. restrictive defect confirmed
- D. obstructive ventilatory defect

20. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with reduced FVC with a normal or high FEV1/FVC ratio. Which interpretation or action is most appropriate?

- A. diagnose restriction from spirometry alone
- B. begin bronchoprovocation testing
- C. measure lung volumes to confirm restriction
- D. attribute the pattern to obstruction

21. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes reduced FVC with a normal or high FEV1/FVC ratio. What is the best next conclusion or response?

- A. measure lung volumes to confirm restriction
- B. begin bronchoprovocation testing
- C. attribute the pattern to obstruction
- D. diagnose restriction from spirometry alone

22. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with a meaningful increase in expiratory flow after albuterol. Which interpretation or action is most appropriate?

- A. fixed upper-airway obstruction
- B. isolated diffusion abnormality
- C. reversible airflow limitation
- D. neuromuscular weakness

23. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes a meaningful increase in expiratory flow after albuterol. What is the best next conclusion or response?

- A. isolated diffusion abnormality
- B. neuromuscular weakness
- C. fixed upper-airway obstruction
- D. reversible airflow limitation

24. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with low DLCO with airflow obstruction and hyperinflation. Which interpretation or action is most appropriate?

- A. uncomplicated asthma

- B. emphysema
- C. chronic bronchitis alone
- D. vocal cord dysfunction

25. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes low DLCO with airflow obstruction and hyperinflation. What is the best next conclusion or response?

- A. emphysema
- B. chronic bronchitis alone
- C. vocal cord dysfunction
- D. uncomplicated asthma

26. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with flattening of both inspiratory and expiratory limbs. Which interpretation or action is most appropriate?

- A. variable extrathoracic obstruction
- B. variable intrathoracic obstruction
- C. fixed large-airway obstruction
- D. small-airway obstruction only

27. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes flattening of both inspiratory and expiratory limbs. What is the best next conclusion or response?

- A. variable intrathoracic obstruction
- B. small-airway obstruction only
- C. variable extrathoracic obstruction
- D. fixed large-airway obstruction

28. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with absent peripheral vascular markings with a visible pleural line. Which interpretation or action is most appropriate?

- A. pneumothorax
- B. lobar consolidation
- C. cardiogenic pulmonary edema
- D. pleural effusion

29. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes absent peripheral vascular markings with a visible pleural line. What is the best next conclusion or response?

- A. cardiogenic pulmonary edema
- B. pneumothorax
- C. pleural effusion
- D. lobar consolidation

30. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with bilateral perihilar fluffy opacities with cardiomegaly. Which interpretation or action is most appropriate?

- A. unilateral pneumothorax
- B. isolated atelectasis
- C. cardiogenic pulmonary edema
- D. hyperinflation from asthma

31. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes bilateral perihilar fluffy opacities with cardiomegaly. What is the best next conclusion or response?

- A. isolated atelectasis

- B. cardiogenic pulmonary edema
- C. hyperinflation from asthma
- D. unilateral pneumothorax

32. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with blunting of the costophrenic angle with a meniscus. Which interpretation or action is most appropriate?

- A. pneumomediastinum
- B. right middle-lobe collapse
- C. diffuse emphysema
- D. pleural effusion

33. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes blunting of the costophrenic angle with a meniscus. What is the best next conclusion or response?

- A. right middle-lobe collapse
- B. pleural effusion
- C. diffuse emphysema
- D. pneumomediastinum

34. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with the tube tip projects at the carina on chest radiograph. Which interpretation or action is most appropriate?

- A. advance into the right mainstem
- B. leave the tube unchanged
- C. withdraw the tube slightly
- D. remove the pilot balloon air

35. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes the tube tip projects at the carina on chest radiograph. What is the best next conclusion or response?

- A. leave the tube unchanged
- B. remove the pilot balloon air
- C. advance into the right mainstem
- D. withdraw the tube slightly

36. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with unilateral absent breath sounds after central line placement. Which interpretation or action is most appropriate?

- A. suspect pneumothorax
- B. diagnose bronchospasm
- C. suspect bilateral atelectasis
- D. identify pulmonary edema

37. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes unilateral absent breath sounds after central line placement. What is the best next conclusion or response?

- A. suspect bilateral atelectasis
- B. identify pulmonary edema
- C. suspect pneumothorax
- D. diagnose bronchospasm

38. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with inspiratory crackles, jugular venous distention, and peripheral edema. Which interpretation or action is most appropriate?

- A. isolated upper-airway obstruction

- B. uncomplicated asthma
- C. acute respiratory alkalosis
- D. heart failure with fluid overload

39. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes inspiratory crackles, jugular venous distention, and peripheral edema. What is the best next conclusion or response?

- A. heart failure with fluid overload
- B. uncomplicated asthma
- C. acute respiratory alkalosis
- D. isolated upper-airway obstruction

40. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with a harsh inspiratory sound loudest over the neck. Which interpretation or action is most appropriate?

- A. fine crackles from edema
- B. stridor from upper-airway narrowing
- C. pleural friction rub
- D. expiratory rhonchi from secretions

41. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes a harsh inspiratory sound loudest over the neck. What is the best next conclusion or response?

- A. pleural friction rub
- B. expiratory rhonchi from secretions
- C. stridor from upper-airway narrowing
- D. fine crackles from edema

42. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with new purulent sputum, fever, and a focal infiltrate. Which interpretation or action is most appropriate?

- A. suspect lower respiratory infection
- B. diagnose pulmonary embolism
- C. attribute findings to uncomplicated asthma
- D. identify cardiogenic edema

43. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes new purulent sputum, fever, and a focal infiltrate. What is the best next conclusion or response?

- A. attribute findings to uncomplicated asthma
- B. identify cardiogenic edema
- C. diagnose pulmonary embolism
- D. suspect lower respiratory infection

44. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with low cardiac output, elevated filling pressures, and cool extremities. Which interpretation or action is most appropriate?

- A. distributive shock with high output
- B. cardiogenic shock
- C. uncomplicated hypovolemia
- D. stable chronic hypertension

45. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes low cardiac output, elevated filling pressures, and cool extremities. What is the best next conclusion or response?

- A. cardiogenic shock

- B. uncomplicated hypovolemia
- C. stable chronic hypertension
- D. distributive shock with high output

46. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a sudden loss of the exhaled carbon dioxide waveform during ventilation. Which interpretation or action is most appropriate?

- A. increase aerosol dosage
- B. calibrate the pulse oximeter
- C. check for disconnection or extubation
- D. begin incentive spirometry

47. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a sudden loss of the exhaled carbon dioxide waveform during ventilation. What is the best next conclusion or response?

- A. calibrate the pulse oximeter
- B. check for disconnection or extubation
- C. begin incentive spirometry
- D. increase aerosol dosage

48. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with a slanted expiratory upstroke and rising plateau. Which interpretation or action is most appropriate?

- A. esophageal intubation
- B. normal neonatal breathing
- C. complete circuit disconnection
- D. airflow obstruction

49. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes a slanted expiratory upstroke and rising plateau. What is the best next conclusion or response?

- A. airflow obstruction
- B. normal neonatal breathing
- C. complete circuit disconnection
- D. esophageal intubation

50. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with recurrent obstructive events with continued respiratory effort. Which interpretation or action is most appropriate?

- A. central sleep apnea
- B. obstructive sleep apnea
- C. normal sleep architecture
- D. isolated nocturnal hypoventilation

51. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes a reusable semicritical respiratory device contacts mucous membranes. What is the best next conclusion or response?

- A. store it without cleaning
- B. use low-level surface dusting alone
- C. wipe it with tap water only
- D. perform high-level disinfection as directed

52. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with care is provided to a patient with suspected pulmonary tuberculosis. Which interpretation or action is most appropriate?

- A. use contact precautions only

- B. wear only sterile gloves
- C. use airborne precautions with a fit-tested respirator
- D. place the patient in a positive-pressure room

53. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes care is provided to a patient with suspected pulmonary tuberculosis. What is the best next conclusion or response?

- A. wear only sterile gloves
- B. place the patient in a positive-pressure room
- C. use contact precautions only
- D. use airborne precautions with a fit-tested respirator

54. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with quality-control values fall outside the acceptable range. Which interpretation or action is most appropriate?

- A. report results with a disclaimer
- B. average the control and patient values
- C. withhold patient reporting and troubleshoot the analyzer
- D. recalibrate the pulse oximeter instead

55. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes quality-control values fall outside the acceptable range. What is the best next conclusion or response?

- A. withhold patient reporting and troubleshoot the analyzer
- B. average the control and patient values
- C. recalibrate the pulse oximeter instead
- D. report results with a disclaimer

56. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with a compressed oxygen cylinder is being transported. Which interpretation or action is most appropriate?

- A. carry it by the valve
- B. secure it upright in an approved carrier
- C. coat the regulator with oil
- D. leave the protective cap loose

57. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes a compressed oxygen cylinder is being transported. What is the best next conclusion or response?

- A. coat the regulator with oil
- B. leave the protective cap loose
- C. carry it by the valve
- D. secure it upright in an approved carrier

58. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with the displayed saturation varies widely in a shivering patient. Which interpretation or action is most appropriate?

- A. diagnose rapid true desaturation
- B. increase PEEP without assessment
- C. improve the signal site and reduce motion artifact
- D. replace the oxygen analyzer cell

59. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes the displayed saturation varies widely in a shivering patient. What is the best next conclusion or response?

- A. improve the signal site and reduce motion artifact

- B. increase PEEP without assessment
- C. replace the oxygen analyzer cell
- D. diagnose rapid true desaturation

60. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a galvanic oxygen analyzer reads lower than expected after calibration. Which interpretation or action is most appropriate?

- A. increase nebulizer flow
- B. drain the chest tube
- C. check for leaks or sensor depletion
- D. change the pulse oximeter probe

61. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a galvanic oxygen analyzer reads lower than expected after calibration. What is the best next conclusion or response?

- A. drain the chest tube
- B. check for leaks or sensor depletion
- C. change the pulse oximeter probe
- D. increase nebulizer flow

62. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with the high-pressure alarm sounds with coarse breath sounds and visible secretions. Which interpretation or action is most appropriate?

- A. assess and suction the airway
- B. disconnect the alarm permanently
- C. decrease oxygen concentration
- D. empty the humidifier reservoir

63. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes the high-pressure alarm sounds with coarse breath sounds and visible secretions. What is the best next conclusion or response?

- A. decrease oxygen concentration
- B. assess and suction the airway
- C. empty the humidifier reservoir
- D. disconnect the alarm permanently

64. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with the low-pressure alarm sounds and exhaled volume suddenly falls. Which interpretation or action is most appropriate?

- A. increase the high-pressure limit
- B. administer a diuretic
- C. perform postural drainage first
- D. inspect the circuit for disconnection or leak

65. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes the low-pressure alarm sounds and exhaled volume suddenly falls. What is the best next conclusion or response?

- A. administer a diuretic
- B. inspect the circuit for disconnection or leak
- C. perform postural drainage first
- D. increase the high-pressure limit

66. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with thick secretions develop while an intubated patient receives a heated humidifier. Which interpretation or action is most appropriate?

- A. check temperature, water level, and circuit function

- B. turn off humidification
- C. use an unheated dry circuit
- D. lower systemic hydration intentionally

67. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes thick secretions develop while an intubated patient receives a heated humidifier. What is the best next conclusion or response?

- A. use an unheated dry circuit
- B. lower systemic hydration intentionally
- C. turn off humidification
- D. check temperature, water level, and circuit function

68. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with a metered-dose inhaler is used with poor hand-breath coordination. Which interpretation or action is most appropriate?

- A. replace it with oxygen tubing
- B. increase cylinder pressure
- C. add a valved holding chamber
- D. remove the actuator mouthpiece

69. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes a metered-dose inhaler is used with poor hand-breath coordination. What is the best next conclusion or response?

- A. add a valved holding chamber
- B. increase cylinder pressure
- C. remove the actuator mouthpiece
- D. replace it with oxygen tubing

70. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with a reusable semicritical respiratory device contacts mucous membranes. Which interpretation or action is most appropriate?

- A. wipe it with tap water only
- B. store it without cleaning
- C. use low-level surface dusting alone
- D. perform high-level disinfection as directed

71. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes a ventilated patient has coarse sounds, visible secretions, and a sawtooth flow waveform. What is the best next conclusion or response?

- A. instill saline routinely before suction
- B. increase cuff pressure instead
- C. preoxygenate as appropriate and suction
- D. schedule suction every hour regardless of need

72. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with an alert patient passes a spontaneous breathing trial and protects the airway. Which interpretation or action is most appropriate?

- A. increase sedation
- B. proceed with an extubation assessment
- C. return immediately to full control ventilation
- D. insert a second endotracheal tube

73. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes an alert patient passes a spontaneous breathing trial and protects the airway. What is the best next conclusion or response?

- A. return immediately to full control ventilation

- B. proceed with an extubation assessment
- C. insert a second endotracheal tube
- D. increase sedation

74. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a cooperative patient with retained secretions and dynamic airway collapse. Which interpretation or action is most appropriate?

- A. teach huff coughing
- B. encourage repeated forceful glottic coughs only
- C. prescribe strict bed rest
- D. eliminate hydration

75. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a cooperative patient with retained secretions and dynamic airway collapse. What is the best next conclusion or response?

- A. prescribe strict bed rest
- B. eliminate hydration
- C. teach huff coughing
- D. encourage repeated forceful glottic coughs only

76. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with a postoperative patient has bibasilar atelectasis and can follow commands. Which interpretation or action is most appropriate?

- A. begin continuous suctioning
- B. restrict ambulation
- C. administer heliox as sole therapy
- D. coach deep breathing and incentive spirometry

77. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes a postoperative patient has bibasilar atelectasis and can follow commands. What is the best next conclusion or response?

- A. restrict ambulation
- B. coach deep breathing and incentive spirometry
- C. administer heliox as sole therapy
- D. begin continuous suctioning

78. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with a stable hypoxemic patient needs a precise moderate oxygen concentration. Which interpretation or action is most appropriate?

- A. use a simple mask at very low flow
- B. use a nasal cannula under a sealed mask
- C. use an air-entrainment mask
- D. use a blow-by setup

79. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes a stable hypoxemic patient needs a precise moderate oxygen concentration. What is the best next conclusion or response?

- A. use a nasal cannula under a sealed mask
- B. use a blow-by setup
- C. use a simple mask at very low flow
- D. use an air-entrainment mask

80. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with a spontaneously breathing patient has severe hypoxemia and high inspiratory demand. Which interpretation or action is most appropriate?

- A. use heated high-flow nasal oxygen

- B. use a low-flow nasal cannula at minimal flow
- C. remove humidification
- D. use room air during assessment

81. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes a spontaneously breathing patient has severe hypoxemia and high inspiratory demand. What is the best next conclusion or response?

- A. remove humidification
- B. use room air during assessment
- C. use heated high-flow nasal oxygen
- D. use a low-flow nasal cannula at minimal flow

82. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with a cooperative COPD patient has acute hypercapnic respiratory acidosis without contraindications. Which interpretation or action is most appropriate?

- A. use CPAP solely to increase ventilation
- B. start bilevel noninvasive ventilation
- C. delay support until mental status worsens
- D. intubate every such patient immediately

83. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes a cooperative COPD patient has acute hypercapnic respiratory acidosis without contraindications. What is the best next conclusion or response?

- A. start bilevel noninvasive ventilation
- B. delay support until mental status worsens
- C. intubate every such patient immediately
- D. use CPAP solely to increase ventilation

84. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with cardiogenic pulmonary edema is alert and breathing spontaneously. Which interpretation or action is most appropriate?

- A. start incentive spirometry alone
- B. administer heliox without pressure
- C. place the patient flat
- D. apply CPAP with oxygen as indicated

85. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes a patient with cardiogenic pulmonary edema is alert and breathing spontaneously. What is the best next conclusion or response?

- A. administer heliox without pressure
- B. apply CPAP with oxygen as indicated
- C. place the patient flat
- D. start incentive spirometry alone

86. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with plateau pressure is high but peak-to-plateau difference is normal. Which interpretation or action is most appropriate?

- A. suspect isolated airway resistance
- B. diagnose a cuff leak
- C. suspect reduced respiratory-system compliance
- D. assume circuit disconnection

87. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes plateau pressure is high but peak-to-plateau difference is normal. What is the best next conclusion or response?

- A. suspect reduced respiratory-system compliance

- B. diagnose a cuff leak
- C. assume circuit disconnection
- D. suspect isolated airway resistance

88. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with peak pressure rises while plateau pressure remains unchanged. Which interpretation or action is most appropriate?

- A. suspect worsening static compliance
- B. diagnose pulmonary edema from plateau alone
- C. reduce PEEP automatically
- D. suspect increased airway resistance

89. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes peak pressure rises while plateau pressure remains unchanged. What is the best next conclusion or response?

- A. diagnose pulmonary edema from plateau alone
- B. reduce PEEP automatically
- C. suspect worsening static compliance
- D. suspect increased airway resistance

90. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with expiratory flow does not return to baseline before the next breath. Which interpretation or action is most appropriate?

- A. increase respiratory rate
- B. lengthen expiratory time
- C. increase tidal volume
- D. shorten expiratory time

91. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes expiratory flow does not return to baseline before the next breath. What is the best next conclusion or response?

- A. lengthen expiratory time
- B. increase tidal volume
- C. shorten expiratory time
- D. increase respiratory rate

92. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with an adult with ARDS requires invasive ventilation. Which interpretation or action is most appropriate?

- A. use large tidal volumes to normalize carbon dioxide
- B. eliminate PEEP
- C. use lung-protective low tidal volume ventilation
- D. target very high plateau pressures

93. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes an adult with ARDS requires invasive ventilation. What is the best next conclusion or response?

- A. eliminate PEEP
- B. target very high plateau pressures
- C. use lung-protective low tidal volume ventilation
- D. use large tidal volumes to normalize carbon dioxide

94. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with the patient makes inspiratory efforts that fail to trigger breaths. Which interpretation or action is most appropriate?

- A. make the trigger more sensitive after checking auto-PEEP

- B. make triggering less sensitive
- C. increase sedation without assessment
- D. disconnect monitoring alarms

95. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes the patient makes inspiratory efforts that fail to trigger breaths. What is the best next conclusion or response?

- A. increase sedation without assessment
- B. disconnect monitoring alarms
- C. make triggering less sensitive
- D. make the trigger more sensitive after checking auto-PEEP

96. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with a stable patient is being evaluated for liberation. Which interpretation or action is most appropriate?

- A. perform bronchoscopy routinely
- B. conduct a spontaneous breathing trial
- C. raise mandatory rate
- D. paralyze the patient

97. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes a stable patient is being evaluated for liberation. What is the best next conclusion or response?

- A. raise mandatory rate
- B. paralyze the patient
- C. conduct a spontaneous breathing trial
- D. perform bronchoscopy routinely

98. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with a patient develops tremor and tachycardia after frequent albuterol. Which interpretation or action is most appropriate?

- A. double every dose automatically
- B. reassess dose and treatment frequency
- C. add another beta agonist immediately
- D. stop all respiratory assessment

99. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes a patient develops tremor and tachycardia after frequent albuterol. What is the best next conclusion or response?

- A. reassess dose and treatment frequency
- B. add another beta agonist immediately
- C. stop all respiratory assessment
- D. double every dose automatically

100. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with a patient uses an inhaled corticosteroid daily. Which interpretation or action is most appropriate?

- A. use it only for immediate rescue
- B. swallow residual medication
- C. stop it whenever symptoms improve for one day
- D. rinse the mouth after each dose

101. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes a patient uses an inhaled corticosteroid daily. What is the best next conclusion or response?

- A. swallow residual medication

- B. rinse the mouth after each dose
- C. stop it whenever symptoms improve for one day
- D. use it only for immediate rescue

102. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a patient with cystic fibrosis receives dornase alfa. Which interpretation or action is most appropriate?

- A. mix it with every nebulized medication
- B. use it as a rapid bronchodilator
- C. administer it separately as prescribed
- D. replace all airway clearance therapy

103. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a patient with cystic fibrosis receives dornase alfa. What is the best next conclusion or response?

- A. use it as a rapid bronchodilator
- B. replace all airway clearance therapy
- C. mix it with every nebulized medication
- D. administer it separately as prescribed

104. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with a patient has severe large-airway obstruction while definitive treatment is arranged. Which interpretation or action is most appropriate?

- A. consider a helium-oxygen mixture
- B. use nitrogen in place of helium
- C. expect heliox to correct inflammation directly
- D. use it for every hypoxemic patient

105. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes a patient has severe large-airway obstruction while definitive treatment is arranged. What is the best next conclusion or response?

- A. expect heliox to correct inflammation directly
- B. use it for every hypoxemic patient
- C. consider a helium-oxygen mixture
- D. use nitrogen in place of helium

106. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with a neonate has hypoxic respiratory failure with pulmonary hypertension. Which interpretation or action is most appropriate?

- A. administer carbon monoxide
- B. replace oxygen with nitrogen
- C. use aerosolized saline as a vasodilator
- D. use inhaled nitric oxide when indicated

107. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes a neonate has hypoxic respiratory failure with pulmonary hypertension. What is the best next conclusion or response?

- A. replace oxygen with nitrogen
- B. use inhaled nitric oxide when indicated
- C. use aerosolized saline as a vasodilator
- D. administer carbon monoxide

108. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with a premature infant has surfactant-deficient respiratory distress syndrome. Which interpretation or action is most appropriate?

- A. administer exogenous surfactant per protocol

- B. give a loop diuretic as replacement
- C. withhold positive pressure in all cases
- D. use a mucolytic as surfactant

109. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes a premature infant has surfactant-deficient respiratory distress syndrome. What is the best next conclusion or response?

- A. withhold positive pressure in all cases
- B. administer exogenous surfactant per protocol
- C. use a mucolytic as surfactant
- D. give a loop diuretic as replacement

110. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with a child has moderate croup with stridor at rest. Which interpretation or action is most appropriate?

- A. perform routine blind suctioning
- B. administer a mucolytic only
- C. force the child to lie flat
- D. give corticosteroid and nebulized epinephrine as indicated

111. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes a child has moderate croup with stridor at rest. What is the best next conclusion or response?

- A. give corticosteroid and nebulized epinephrine as indicated
- B. administer a mucolytic only
- C. force the child to lie flat
- D. perform routine blind suctioning

112. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with a patient has an acute asthma exacerbation with wheezing and increased work. Which interpretation or action is most appropriate?

- A. begin a long-acting bronchodilator alone for rescue
- B. withhold oxygen despite hypoxemia
- C. administer an inhaled short-acting bronchodilator
- D. use antibiotics routinely

113. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes a patient has an acute asthma exacerbation with wheezing and increased work. What is the best next conclusion or response?

- A. withhold oxygen despite hypoxemia
- B. use antibiotics routinely
- C. administer an inhaled short-acting bronchodilator
- D. begin a long-acting bronchodilator alone for rescue

114. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with a COPD patient with chronic carbon dioxide retention is hypoxemic. Which interpretation or action is most appropriate?

- A. titrate oxygen to the prescribed target and reassess
- B. withhold oxygen completely
- C. give uncontrolled maximal oxygen without monitoring
- D. use carbon dioxide inhalation

115. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes a COPD patient with chronic carbon dioxide retention is hypoxemic. What is the best next conclusion or response?

- A. give uncontrolled maximal oxygen without monitoring

- B. use carbon dioxide inhalation
- C. withhold oxygen completely
- D. titrate oxygen to the prescribed target and reassess

116. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a patient has acute cardiogenic pulmonary edema with hypertension. Which interpretation or action is most appropriate?

- A. perform postural drainage as primary therapy
- B. support oxygenation and positive pressure while treating cardiac cause
- C. give routine mucolytic treatment
- D. remove all airway pressure

117. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a patient has acute cardiogenic pulmonary edema with hypertension. What is the best next conclusion or response?

- A. give routine mucolytic treatment
- B. remove all airway pressure
- C. perform postural drainage as primary therapy
- D. support oxygenation and positive pressure while treating cardiac cause

118. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with a ventilated patient suddenly becomes hypotensive with unilateral absent sounds and tracheal shift. Which interpretation or action is most appropriate?

- A. activate emergency decompression response
- B. wait for routine spirometry
- C. increase tidal volume
- D. begin incentive spirometry

119. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes a ventilated patient suddenly becomes hypotensive with unilateral absent sounds and tracheal shift. What is the best next conclusion or response?

- A. increase tidal volume
- B. activate emergency decompression response
- C. begin incentive spirometry
- D. wait for routine spirometry

120. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with a patient with suspected pulmonary embolism is acutely hypoxemic. Which interpretation or action is most appropriate?

- A. perform routine chest percussion
- B. administer surfactant
- C. provide oxygen and expedite definitive evaluation
- D. delay assessment until sputum develops

121. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes a patient with suspected pulmonary embolism is acutely hypoxemic. What is the best next conclusion or response?

- A. administer surfactant
- B. provide oxygen and expedite definitive evaluation
- C. delay assessment until sputum develops
- D. perform routine chest percussion

122. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with a mechanically ventilated patient requires intrahospital transport. Which interpretation or action is most appropriate?

- A. disconnect alarms for convenience

- B. transport without a backup ventilation device
- C. empty the oxygen cylinder first
- D. verify oxygen supply, battery, airway equipment, and monitoring

123. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes a mechanically ventilated patient requires intrahospital transport. What is the best next conclusion or response?

- A. transport without a backup ventilation device
- B. empty the oxygen cylinder first
- C. verify oxygen supply, battery, airway equipment, and monitoring
- D. disconnect alarms for convenience

124. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with a stable COPD patient has exertional limitation. Which interpretation or action is most appropriate?

- A. recommend supervised pulmonary rehabilitation
- B. prescribe prolonged inactivity
- C. use antibiotics continuously
- D. avoid all resistance exercise

125. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes a stable COPD patient has exertional limitation. What is the best next conclusion or response?

- A. recommend supervised pulmonary rehabilitation
- B. use antibiotics continuously
- C. avoid all resistance exercise
- D. prescribe prolonged inactivity

126. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with a tobacco user is willing to quit. Which interpretation or action is most appropriate?

- A. recommend abrupt counseling cessation
- B. combine counseling with appropriate pharmacotherapy
- C. use oxygen as cessation therapy
- D. delay support until severe disease

127. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. During assessment or treatment, the therapist notes a tobacco user is willing to quit. What is the best next conclusion or response?

- A. use oxygen as cessation therapy
- B. delay support until severe disease
- C. combine counseling with appropriate pharmacotherapy
- D. recommend abrupt counseling cessation

128. While evaluating a change in respiratory status, the therapist considers these findings. A respiratory therapist evaluates a patient with a spontaneously breathing tracheostomy patient is assessed for a speaking valve. Which interpretation or action is most appropriate?

- A. inflate the cuff fully before placement
- B. occlude the expiratory pathway permanently
- C. use the valve during complete airway obstruction
- D. ensure cuff deflation and upper-airway patency

129. During a targeted bedside examination, the therapist must determine the best response. During assessment or treatment, the therapist notes a spontaneously breathing tracheostomy patient is assessed for a speaking valve. What is the best next conclusion or response?

- A. occlude the expiratory pathway permanently

- B. use the valve during complete airway obstruction
- C. ensure cuff deflation and upper-airway patency
- D. inflate the cuff fully before placement

130. After reviewing the newest clinical data, the therapist evaluates this presentation. A respiratory therapist evaluates a patient with a patient is prepared for flexible bronchoscopy. Which interpretation or action is most appropriate?

- A. remove all monitoring
- B. give food immediately beforehand
- C. disable suction equipment
- D. verify consent, oxygenation, suction, monitoring, and emergency readiness

131. Before continuing respiratory treatment, the therapist verifies the following situation. During assessment or treatment, the therapist notes a patient is prepared for flexible bronchoscopy. What is the best next conclusion or response?

- A. give food immediately beforehand
- B. verify consent, oxygenation, suction, monitoring, and emergency readiness
- C. disable suction equipment
- D. remove all monitoring

132. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. A respiratory therapist evaluates a patient with a patient develops sudden dyspnea after thoracentesis. Which interpretation or action is most appropriate?

- A. assess immediately for pneumothorax
- B. encourage unmonitored ambulation
- C. perform a methacholine challenge
- D. assume anxiety without assessment

133. During a care-plan update, the therapist considers the patient and equipment findings. During assessment or treatment, the therapist notes a patient develops sudden dyspnea after thoracentesis. What is the best next conclusion or response?

- A. perform a methacholine challenge
- B. assess immediately for pneumothorax
- C. assume anxiety without assessment
- D. encourage unmonitored ambulation

134. At the start of an unscheduled respiratory reassessment, the therapist reviews this case. A respiratory therapist evaluates a patient with an unconscious adult without suspected cervical injury has upper-airway obstruction. Which interpretation or action is most appropriate?

- A. place the patient prone
- B. apply abdominal thrusts immediately
- C. insert a chest tube
- D. perform a head-tilt chin-lift

135. While evaluating a change in respiratory status, the therapist considers these findings. During assessment or treatment, the therapist notes an unconscious adult without suspected cervical injury has upper-airway obstruction. What is the best next conclusion or response?

- A. perform a head-tilt chin-lift
- B. apply abdominal thrusts immediately
- C. insert a chest tube
- D. place the patient prone

136. During a targeted bedside examination, the therapist must determine the best response. A respiratory therapist evaluates a patient with an unconscious trauma patient may have cervical spine injury. Which interpretation or action is most appropriate?

- A. perform full neck extension

- B. place a pillow under the neck
- C. use a jaw-thrust while stabilizing the neck
- D. rotate the head sharply

137. After reviewing the newest clinical data, the therapist evaluates this presentation. During assessment or treatment, the therapist notes an unconscious trauma patient may have cervical spine injury. What is the best next conclusion or response?

- A. place a pillow under the neck
- B. rotate the head sharply
- C. use a jaw-thrust while stabilizing the neck
- D. perform full neck extension

138. Before continuing respiratory treatment, the therapist verifies the following situation. A respiratory therapist evaluates a patient with an endotracheal tube cuff pressure is excessive. Which interpretation or action is most appropriate?

- A. inflate until no pilot balloon compliance remains
- B. remove air to the safe occlusive range
- C. deflate the cuff completely during ventilation
- D. advance the tube into a main bronchus

139. In a fresh critical-care scenario, the therapist identifies the priority interpretation or action. During assessment or treatment, the therapist notes an endotracheal tube cuff pressure is excessive. What is the best next conclusion or response?

- A. deflate the cuff completely during ventilation
- B. advance the tube into a main bronchus
- C. inflate until no pilot balloon compliance remains
- D. remove air to the safe occlusive range

140. During a care-plan update, the therapist considers the patient and equipment findings. A respiratory therapist evaluates a patient with a ventilated patient has coarse sounds, visible secretions, and a sawtooth flow waveform. Which interpretation or action is most appropriate?

- A. preoxygenate as appropriate and suction
- B. schedule suction every hour regardless of need
- C. instill saline routinely before suction
- D. increase cuff pressure instead

Practice Exam 6: Answer Key and Explanations

1. C — Continued chest and abdominal effort despite absent airflow indicates upper-airway obstruction rather than loss of central respiratory drive. This makes obstructive sleep apnea the single best response. The alternatives—normal sleep architecture, isolated nocturnal hypoventilation, and central sleep apnea—do not fit the stated findings or would delay the indicated assessment or treatment.

2. D — Prematurity, respiratory distress, and diffuse reticulogranular disease indicate surfactant deficiency and neonatal respiratory distress syndrome. This makes neonatal respiratory distress syndrome the single best response. The alternatives—transient tachypnea without distress, meconium aspiration in a term infant, and congenital diaphragmatic hernia—do not fit the stated findings or would delay the indicated assessment or treatment.

3. A — Prematurity, respiratory distress, and diffuse reticulogranular disease indicate surfactant deficiency and neonatal respiratory distress syndrome. This makes neonatal respiratory distress syndrome the single best response. The alternatives—meconium aspiration in a term infant, congenital diaphragmatic hernia, and transient tachypnea without distress—do not fit the stated findings or would delay the indicated assessment or treatment.

4. B — A barking cough with stridor is the classic presentation of viral laryngotracheobronchitis, commonly called croup. This makes croup the single best response. The alternatives—bronchiolitis, epiglottitis with drooling, and foreign-body aspiration with unilateral wheeze—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

5. D — A barking cough with stridor is the classic presentation of viral laryngotracheobronchitis, commonly called croup. This makes croup the single best response. The alternatives—epiglottitis with drooling, foreign-body aspiration with unilateral wheeze, and bronchiolitis—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

6. C — Viral bronchiolitis commonly causes small-airway edema, wheezing, crackles, and feeding or oxygenation difficulty in infants. This makes bronchiolitis the single best response. The alternatives—croup, bacterial tracheitis, and isolated pleural effusion—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

7. A — Viral bronchiolitis commonly causes small-airway edema, wheezing, crackles, and feeding or oxygenation difficulty in infants. This makes bronchiolitis the single best response. The alternatives—bacterial tracheitis, isolated pleural effusion, and croup—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

8. B — The acidemia and elevated carbon dioxide identify primary ventilatory failure. The bicarbonate is near normal, so renal compensation has not substantially developed. This makes acute respiratory acidosis the single best response. The alternatives—acute respiratory alkalosis, metabolic acidosis, and fully compensated respiratory acidosis—do not fit the stated findings or would delay the indicated assessment or treatment.

9. D — The acidemia and elevated carbon dioxide identify primary ventilatory failure. The bicarbonate is near normal, so renal compensation has not substantially developed. This makes acute respiratory acidosis the single best response. The alternatives—metabolic acidosis, fully compensated respiratory acidosis, and acute respiratory alkalosis—do not fit the stated findings or would delay the indicated assessment or treatment.

10. B — Alkalemia with a reduced carbon dioxide level indicates primary hyperventilation. The nearly normal bicarbonate supports an acute rather than chronic disorder. This makes acute respiratory alkalosis the single best response. The alternatives—metabolic alkalosis, compensated respiratory acidosis, and mixed respiratory and metabolic acidosis—do not fit the stated findings or would delay the indicated assessment or treatment.

11. A — Alkalemia with a reduced carbon dioxide level indicates primary hyperventilation. The nearly normal bicarbonate supports an acute rather than chronic disorder. This makes acute respiratory alkalosis the single best response. The alternatives—compensated respiratory acidosis, mixed respiratory and metabolic acidosis, and metabolic alkalosis—do not fit the stated findings or would delay the indicated assessment or treatment.

12. C — A room-air arterial oxygen tension of 55 mm Hg represents significant hypoxemia and requires prompt assessment of cause and oxygen support. This makes clinically important hypoxemia the single best response. The alternatives—normal age-related oxygenation, isolated ventilatory failure, and laboratory analyzer contamination—do not fit the stated findings or would delay the indicated assessment or treatment.

13. A — A room-air arterial oxygen tension of 55 mm Hg represents significant hypoxemia and requires prompt assessment of cause and oxygen support. This makes clinically important hypoxemia the single best response. The alternatives—isolated ventilatory failure, laboratory analyzer contamination, and

normal age-related oxygenation—do not fit the stated findings or would delay the indicated assessment or treatment.

14. B — Conventional pulse oximetry cannot reliably distinguish oxyhemoglobin from carboxyhemoglobin. Multiwavelength CO-oximetry is needed after smoke exposure. This makes obtain CO-oximetry the single best response. The alternatives—repeat standard pulse oximetry, perform peak expiratory flow, and measure serum bicarbonate only—do not fit the stated findings or would delay the indicated assessment or treatment.

15. D — Conventional pulse oximetry cannot reliably distinguish oxyhemoglobin from carboxyhemoglobin. Multiwavelength CO-oximetry is needed after smoke exposure. This makes obtain CO-oximetry the single best response. The alternatives—perform peak expiratory flow, measure serum bicarbonate only, and repeat standard pulse oximetry—do not fit the stated findings or would delay the indicated assessment or treatment.

16. C — Persistent cyanosis with an oxygen saturation near the characteristic mid-eighties plateau suggests dyshemoglobinemia, which CO-oximetry can identify. This makes measure methemoglobin by CO-oximetry the single best response. The alternatives—increase PEEP immediately, obtain a sputum Gram stain, and perform a methacholine challenge—do not fit the stated findings or would delay the indicated assessment or treatment.

17. B — Persistent cyanosis with an oxygen saturation near the characteristic mid-eighties plateau suggests dyshemoglobinemia, which CO-oximetry can identify. This makes measure methemoglobin by CO-oximetry the single best response. The alternatives—obtain a sputum Gram stain, perform a methacholine challenge, and increase PEEP immediately—do not fit the stated findings or would delay the indicated assessment or treatment.

18. A — A disproportionately reduced FEV1 relative to FVC produces a low ratio and is the defining spirometric pattern of airflow obstruction. This makes obstructive ventilatory defect the single best response. The alternatives—restrictive defect confirmed, normal ventilatory mechanics, and isolated diffusion impairment—do not fit the stated findings or would delay the indicated assessment or treatment.

19. D — A disproportionately reduced FEV1 relative to FVC produces a low ratio and is the defining spirometric pattern of airflow obstruction. This makes obstructive ventilatory defect the single best response. The alternatives—normal ventilatory mechanics, isolated diffusion impairment, and restrictive defect confirmed—do not fit the stated findings or would delay the indicated assessment or treatment.

20. C — Spirometry can suggest restriction but cannot confirm reduced total lung capacity. Static lung-volume measurement is necessary for confirmation. This makes measure lung volumes to confirm restriction the single best response. The alternatives—diagnose restriction from spirometry alone, begin bronchoprovocation testing, and attribute the pattern to obstruction—do not fit the stated findings or would delay the indicated assessment or treatment.

21. A — Spirometry can suggest restriction but cannot confirm reduced total lung capacity. Static lung-volume measurement is necessary for confirmation. This makes measure lung volumes to confirm restriction the single best response. The alternatives—begin bronchoprovocation testing, attribute the pattern to obstruction, and diagnose restriction from spirometry alone—do not fit the stated findings or would delay the indicated assessment or treatment.

22. C — Improvement after a short-acting bronchodilator demonstrates a reversible component of airflow limitation and supports responsive airway disease. This makes reversible airflow limitation the single best response. The alternatives—fixed upper-airway obstruction, isolated diffusion abnormality, and neuromuscular weakness—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation

23. D — Improvement after a short-acting bronchodilator demonstrates a reversible component of airflow limitation and supports responsive airway disease. This makes reversible airflow limitation the single best response. The alternatives—isolated diffusion abnormality, neuromuscular weakness, and fixed upper-airway obstruction—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation

24. B — Emphysematous destruction reduces alveolar-capillary surface area, producing a low diffusing capacity alongside obstruction and hyperinflation. This makes emphysema the single best response. The alternatives—uncomplicated asthma, chronic bronchitis alone, and vocal cord dysfunction—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

25. A — Emphysematous destruction reduces alveolar-capillary surface area, producing a low diffusing capacity alongside obstruction and hyperinflation. This makes emphysema the single best response. The alternatives—chronic bronchitis alone, vocal cord dysfunction, and uncomplicated asthma—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

26. C — A fixed central obstruction limits flow during both phases of breathing, causing plateaus on the inspiratory and expiratory limbs. This makes fixed large-airway obstruction the single best response. The alternatives—variable extrathoracic obstruction, variable intrathoracic obstruction, and small-airway obstruction only—do not fit the stated findings or would delay the indicated assessment or treatment.

27. D — A fixed central obstruction limits flow during both phases of breathing, causing plateaus on the inspiratory and expiratory limbs. This makes fixed large-airway obstruction the single best response. The alternatives—variable intrathoracic obstruction, small-airway obstruction only, and variable extrathoracic obstruction—do not fit the stated findings or would delay the indicated assessment or treatment.

28. A — A pleural line with no lung markings beyond it indicates air in the pleural space and separation of visceral from parietal pleura. This makes pneumothorax the single best response. The alternatives—lobar consolidation, cardiogenic pulmonary edema, and pleural effusion—do not fit the stated findings or would delay the indicated assessment or treatment.

29. B — A pleural line with no lung markings beyond it indicates air in the pleural space and separation of visceral from parietal pleura. This makes pneumothorax the single best response. The alternatives—cardiogenic pulmonary edema, pleural effusion, and lobar consolidation—do not fit the stated findings or would delay the indicated assessment or treatment.

30. C — Central bilateral opacities and an enlarged cardiac silhouette strongly support hydrostatic pulmonary edema from left-sided cardiac dysfunction. This makes cardiogenic pulmonary edema the single best response. The alternatives—unilateral pneumothorax, isolated atelectasis, and hyperinflation from asthma—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at

31. B — Central bilateral opacities and an enlarged cardiac silhouette strongly support hydrostatic pulmonary edema from left-sided cardiac dysfunction. This makes cardiogenic pulmonary edema the single best response. The alternatives—isolated atelectasis, hyperinflation from asthma, and unilateral pneumothorax—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at

32. D — Dependent pleural fluid produces costophrenic blunting and a curved meniscus rather than an air-filled hyperlucent pattern. This makes pleural effusion the single best response. The alternatives—pneumomediastinum, right middle-lobe collapse, and diffuse emphysema—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

33. B — Dependent pleural fluid produces costophrenic blunting and a curved meniscus rather than an air-filled hyperlucent pattern. This makes pleural effusion the single best response. The alternatives—right middle-lobe collapse, diffuse emphysema, and pneumomediastinum—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

34. C — A tip at the carina can migrate into a main bronchus with head movement. Withdrawing it restores an appropriate tracheal position. This makes withdraw the tube slightly the single best response. The alternatives—advance into the right mainstem, leave the tube unchanged, and remove the pilot balloon air—do not fit the stated findings or would delay the indicated assessment or treatment.

35. D — A tip at the carina can migrate into a main bronchus with head movement. Withdrawing it restores an appropriate tracheal position. This makes withdraw the tube slightly the single best response. The alternatives—leave the tube unchanged, remove the pilot balloon air, and advance into the right mainstem—do not fit the stated findings or would delay the indicated assessment or treatment.

36. A — Acute unilateral loss of breath sounds after an invasive thoracic procedure is concerning for an iatrogenic pneumothorax. This makes suspect pneumothorax the single best response. The alternatives—diagnose bronchospasm, suspect bilateral atelectasis, and identify pulmonary edema—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at

37. C — Acute unilateral loss of breath sounds after an invasive thoracic procedure is concerning for an iatrogenic pneumothorax. This makes suspect pneumothorax the single best response. The alternatives—suspect bilateral atelectasis, identify pulmonary edema, and diagnose bronchospasm—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at

38. D — Crackles plus systemic venous congestion indicate excess intravascular volume and cardiac pump failure rather than isolated airway disease. This makes heart failure with fluid overload the single best response. The alternatives—isolated upper-airway obstruction, uncomplicated asthma, and acute respiratory alkalosis—do not fit the stated findings or would delay the indicated assessment or treatment.

39. A — Crackles plus systemic venous congestion indicate excess intravascular volume and cardiac pump failure rather than isolated airway disease. This makes heart failure with fluid overload the single best response. The alternatives—uncomplicated asthma, acute respiratory alkalosis, and isolated upper-airway obstruction—do not fit the stated findings or would delay the indicated assessment or treatment.

40. B — Stridor is generated by turbulent flow through a narrowed upper airway and is typically loudest over the neck. This makes stridor from upper-airway narrowing the single best response. The alternatives—fine crackles from edema, pleural friction rub, and expiratory rhonchi from secretions—do not fit the stated findings or would delay the indicated assessment or treatment.

41. C — Stridor is generated by turbulent flow through a narrowed upper airway and is typically loudest over the neck. This makes stridor from upper-airway narrowing the single best response. The alternatives—pleural friction rub, expiratory rhonchi from secretions, and fine crackles from edema—do not fit the stated findings or would delay the indicated assessment or treatment.

42. A — Purulence, systemic fever, and focal airspace disease form a coherent infectious pattern and warrant microbiologic and clinical evaluation. This makes suspect lower respiratory infection the single best response. The alternatives—diagnose pulmonary embolism, attribute findings to uncomplicated asthma, and identify cardiogenic edema—do not fit the stated findings or would delay the indicated assessment or treatment.

43. D — Purulence, systemic fever, and focal airspace disease form a coherent infectious pattern and warrant microbiologic and clinical evaluation. This makes suspect lower respiratory infection the single best response. The alternatives—attribute findings to uncomplicated asthma, identify cardiogenic edema, and diagnose pulmonary embolism—do not fit the stated findings or would delay the indicated assessment or treatment.

44. B — Poor forward flow with congestion and peripheral vasoconstriction is characteristic of pump failure and cardiogenic shock. This makes cardiogenic shock the single best response. The alternatives—distributive shock with high output, uncomplicated hypovolemia, and stable chronic hypertension—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation

45. A — Poor forward flow with congestion and peripheral vasoconstriction is characteristic of pump failure and cardiogenic shock. This makes cardiogenic shock the single best response. The alternatives—uncomplicated hypovolemia, stable chronic hypertension, and distributive shock with high output—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation

46. C — Abrupt disappearance of exhaled carbon dioxide most urgently suggests loss of the airway or circuit continuity, although arrest is another consideration. This makes check for disconnection or extubation the single best response. The alternatives—increase aerosol dosage, calibrate the pulse oximeter, and begin incentive spirometry—do not fit the stated findings or would delay the indicated assessment or treatment.

47. B — Abrupt disappearance of exhaled carbon dioxide most urgently suggests loss of the airway or circuit continuity, although arrest is another consideration. This makes check for disconnection or extubation the single best response. The alternatives—calibrate the pulse oximeter, begin incentive spirometry, and increase aerosol dosage—do not fit the stated findings or would delay the indicated assessment or treatment.

48. D — The shark-fin contour reflects prolonged, uneven exhalation caused by increased airway resistance, commonly from bronchospasm. This makes airflow obstruction the single best response. The alternatives—esophageal intubation, normal neonatal breathing, and complete circuit disconnection—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

49. A — The shark-fin contour reflects prolonged, uneven exhalation caused by increased airway resistance, commonly from bronchospasm. This makes airflow obstruction the single best response. The alternatives—normal neonatal breathing, complete circuit disconnection, and esophageal intubation—do not fit the stated findings or would delay the indicated assessment or treatment. Clinical context, response, safety, and subsequent reassessment should still guide implementation at the bedside.

50. B — Continued chest and abdominal effort despite absent airflow indicates upper-airway obstruction rather than loss of central respiratory drive. This makes obstructive sleep apnea the single best response. The alternatives—central sleep apnea, normal sleep architecture, and isolated nocturnal hypoventilation—do not fit the stated findings or would delay the indicated assessment or treatment.

51. D — Semicritical equipment requires at least high-level disinfection after cleaning because it contacts mucous membranes but does not normally enter sterile tissue. This makes perform high-level disinfection as directed the single best response. The alternatives—store it without cleaning, use low-

level surface dusting alone, and wipe it with tap water only—do not fit the stated findings or would delay the indicated assessment

52. C — Tuberculosis spreads through airborne particles, requiring respiratory protection and an airborne infection isolation environment. This makes use airborne precautions with a fit-tested respirator the single best response. The alternatives—use contact precautions only, wear only sterile gloves, and place the patient in a positive-pressure room—do not fit the stated findings or would delay the indicated assessment or treatment.

53. D — Tuberculosis spreads through airborne particles, requiring respiratory protection and an airborne infection isolation environment. This makes use airborne precautions with a fit-tested respirator the single best response. The alternatives—wear only sterile gloves, place the patient in a positive-pressure room, and use contact precautions only—do not fit the stated findings or would delay the indicated assessment or treatment.

54. C — Out-of-range controls invalidate confidence in patient measurements. Testing should pause until the cause is corrected and acceptable control performance is restored. This makes withhold patient reporting and troubleshoot the analyzer the single best response. The alternatives—report results with a disclaimer, average the control and patient values, and recalibrate the pulse oximeter instead—do not fit the stated findings or would delay

55. A — Out-of-range controls invalidate confidence in patient measurements. Testing should pause until the cause is corrected and acceptable control performance is restored. This makes withhold patient reporting and troubleshoot the analyzer the single best response. The alternatives—average the control and patient values, recalibrate the pulse oximeter instead, and report results with a disclaimer—do not fit the stated findings or would delay

56. B — Securing a compressed-gas cylinder prevents falls and valve damage that could turn the cylinder into a dangerous projectile. This makes secure it upright in an approved carrier the single best response. The alternatives—carry it by the valve, coat the regulator with oil, and leave the protective cap loose—do not fit the stated findings or would delay the indicated assessment or

57. D — Securing a compressed-gas cylinder prevents falls and valve damage that could turn the cylinder into a dangerous projectile. This makes secure it upright in an approved carrier the single best response. The alternatives—coat the regulator with oil, leave the protective cap loose, and carry it by the valve—do not fit the stated findings or would delay the indicated assessment or

58. C — Motion and poor perfusion can corrupt photoplethysmographic signals. Improving probe contact and choosing a better-perfused site improve reliability. This makes improve the signal site and reduce motion artifact the single best response. The alternatives—diagnose rapid true desaturation, increase PEEP without assessment, and replace the oxygen analyzer cell—do not fit the stated findings or would delay the indicated assessment or treatment.

59. A — Motion and poor perfusion can corrupt photoplethysmographic signals. Improving probe contact and choosing a better-perfused site improve reliability. This makes improve the signal site and

reduce motion artifact the single best response. The alternatives—increase PEEP without assessment, replace the oxygen analyzer cell, and diagnose rapid true desaturation—do not fit the stated findings or would delay the indicated assessment or treatment.

60. C — Low readings after proper calibration suggest entrained room air, a leak, or an exhausted electrochemical sensor. This makes check for leaks or sensor depletion the single best response. The alternatives—increase nebulizer flow, drain the chest tube, and change the pulse oximeter probe—do not fit the stated findings or would delay the indicated assessment or treatment.

61. B — Low readings after proper calibration suggest entrained room air, a leak, or an exhausted electrochemical sensor. This makes check for leaks or sensor depletion the single best response. The alternatives—drain the chest tube, change the pulse oximeter probe, and increase nebulizer flow—do not fit the stated findings or would delay the indicated assessment or treatment.

62. A — Secretions increase airway resistance and peak pressure. Airway assessment and suctioning address the likely cause while preserving alarm protection. This makes assess and suction the airway the single best response. The alternatives—disconnect the alarm permanently, decrease oxygen concentration, and empty the humidifier reservoir—do not fit the stated findings or would delay the indicated assessment or treatment.

63. B — Secretions increase airway resistance and peak pressure. Airway assessment and suctioning address the likely cause while preserving alarm protection. This makes assess and suction the airway the single best response. The alternatives—decrease oxygen concentration, empty the humidifier reservoir, and disconnect the alarm permanently—do not fit the stated findings or would delay the indicated assessment or treatment.

64. D — A large circuit leak or disconnection reduces delivered and returned volume, commonly activating low-pressure and low-volume alarms. This makes inspect the circuit for disconnection or leak the single best response. The alternatives—increase the high-pressure limit, administer a diuretic, and perform postural drainage first—do not fit the stated findings or would delay the indicated assessment or treatment.

65. B — A large circuit leak or disconnection reduces delivered and returned volume, commonly activating low-pressure and low-volume alarms. This makes inspect the circuit for disconnection or leak the single best response. The alternatives—administer a diuretic, perform postural drainage first, and increase the high-pressure limit—do not fit the stated findings or would delay the indicated assessment or treatment.

66. A — Inadequate active humidification dries airway secretions. The system should be checked for temperature delivery, water supply, and proper assembly. This makes check temperature, water level, and circuit function the single best response. The alternatives—turn off humidification, use an unheated dry circuit, and lower systemic hydration intentionally—do not fit the stated findings or would delay the indicated assessment or treatment.

67. D — Inadequate active humidification dries airway secretions. The system should be checked for temperature delivery, water supply, and proper assembly. This makes check temperature, water level, and circuit function the single best response. The alternatives—use an unheated dry circuit, lower systemic hydration intentionally, and turn off humidification—do not fit the stated findings or would delay the indicated assessment or treatment.

68. C — A valved holding chamber reduces dependence on precise actuation timing and improves delivery to the lower respiratory tract. This makes add a valved holding chamber the single best response. The alternatives—replace it with oxygen tubing, increase cylinder pressure, and remove the actuator mouthpiece—do not fit the stated findings or would delay the indicated assessment or treatment.

69. A — A valved holding chamber reduces dependence on precise actuation timing and improves delivery to the lower respiratory tract. This makes add a valved holding chamber the single best response. The alternatives—increase cylinder pressure, remove the actuator mouthpiece, and replace it with oxygen tubing—do not fit the stated findings or would delay the indicated assessment or treatment.

70. D — Semicritical equipment requires at least high-level disinfection after cleaning because it contacts mucous membranes but does not normally enter sterile tissue. This makes perform high-level disinfection as directed the single best response. The alternatives—wipe it with tap water only, store it without cleaning, and use low-level surface dusting alone—do not fit the stated findings or would delay the indicated assessment

71. C — Clinical evidence of retained secretions supports suctioning. Preoxygenation and appropriate technique reduce procedure-related hypoxemia and trauma. This makes preoxygenate as appropriate and suction the single best response. The alternatives—instill saline routinely before suction, increase cuff pressure instead, and schedule suction every hour regardless of need—do not fit the stated findings or would delay the indicated assessment or treatment.

72. B — Successful spontaneous breathing plus airway protection supports liberation, while secretion burden and upper-airway patency must still be assessed. This makes proceed with an extubation assessment the single best response. The alternatives—increase sedation, return immediately to full control ventilation, and insert a second endotracheal tube—do not fit the stated findings or would delay the indicated assessment or treatment.

73. B — Successful spontaneous breathing plus airway protection supports liberation, while secretion burden and upper-airway patency must still be assessed. This makes proceed with an extubation assessment the single best response. The alternatives—return immediately to full control ventilation, insert a second endotracheal tube, and increase sedation—do not fit the stated findings or would delay the indicated assessment or treatment.

74. A — A huff uses an open glottis and can mobilize secretions with less airway compression than a forceful cough. This makes teach huff coughing the single best response. The alternatives—encourage repeated forceful glottic coughs only, prescribe strict bed rest, and eliminate hydration—do not fit the stated findings or would delay the indicated assessment or treatment.

75. C — A huff uses an open glottis and can mobilize secretions with less airway compression than a forceful cough. This makes teach huff coughing the single best response. The alternatives—prescribe strict bed rest, eliminate hydration, and encourage repeated forceful glottic coughs only—do not fit the stated findings or would delay the indicated assessment or treatment.

76. D — Voluntary sustained inspirations, mobilization, and pain control help reopen dependent lung units after surgery. This makes coach deep breathing and incentive spirometry the single best response. The alternatives—begin continuous suctioning, restrict ambulation, and administer heliox as sole therapy—do not fit the stated findings or would delay the indicated assessment or treatment.

77. B — Voluntary sustained inspirations, mobilization, and pain control help reopen dependent lung units after surgery. This makes coach deep breathing and incentive spirometry the single best response. The alternatives—restrict ambulation, administer heliox as sole therapy, and begin continuous suctioning—do not fit the stated findings or would delay the indicated assessment or treatment.

78. C — An air-entrainment mask delivers a predictable concentration by mixing oxygen with a fixed proportion of room air. This makes use an air-entrainment mask the single best response. The alternatives—use a simple mask at very low flow, use a nasal cannula under a sealed mask, and use a blow-by setup—do not fit the stated findings or would delay the indicated assessment

79. D — An air-entrainment mask delivers a predictable concentration by mixing oxygen with a fixed proportion of room air. This makes use an air-entrainment mask the single best response. The alternatives—use a nasal cannula under a sealed mask, use a blow-by setup, and use a simple mask at very low flow—do not fit the stated findings or would delay the indicated assessment

80. A — Heated high-flow nasal oxygen can meet inspiratory demand, reduce entrainment, provide humidification, and deliver a more stable oxygen concentration. This makes use heated high-flow nasal oxygen the single best response. The alternatives—use a low-flow nasal cannula at minimal flow, remove humidification, and use room air during assessment—do not fit the stated findings or would delay the indicated assessment or treatment.

81. C — Heated high-flow nasal oxygen can meet inspiratory demand, reduce entrainment, provide humidification, and deliver a more stable oxygen concentration. This makes use heated high-flow nasal oxygen the single best response. The alternatives—remove humidification, use room air during assessment, and use a low-flow nasal cannula at minimal flow—do not fit the stated findings or would delay the indicated assessment or treatment.

82. B — Bilevel support increases inspiratory assistance, improves alveolar ventilation, and can reduce work of breathing in selected COPD exacerbations. This makes start bilevel noninvasive ventilation the single best response. The alternatives—use CPAP solely to increase ventilation, delay support until mental status worsens, and intubate every such patient immediately—do not fit the stated findings or would delay the indicated assessment or treatment.

83. A — Bilevel support increases inspiratory assistance, improves alveolar ventilation, and can reduce work of breathing in selected COPD exacerbations. This makes start bilevel noninvasive ventilation the

single best response. The alternatives—delay support until mental status worsens, intubate every such patient immediately, and use CPAP solely to increase ventilation—do not fit the stated findings or would delay the indicated assessment or treatment.

84. D — Positive airway pressure recruits alveoli, improves oxygenation, and can reduce cardiac preload and afterload in cardiogenic edema. This makes apply CPAP with oxygen as indicated the single best response. The alternatives—start incentive spirometry alone, administer heliox without pressure, and place the patient flat—do not fit the stated findings or would delay the indicated assessment or treatment.

85. B — Positive airway pressure recruits alveoli, improves oxygenation, and can reduce cardiac preload and afterload in cardiogenic edema. This makes apply CPAP with oxygen as indicated the single best response. The alternatives—administer heliox without pressure, place the patient flat, and start incentive spirometry alone—do not fit the stated findings or would delay the indicated assessment or treatment.

86. C — When both peak and plateau pressures rise together, the problem lies in lung or chest-wall compliance rather than resistive pressure. This makes suspect reduced respiratory-system compliance the single best response. The alternatives—suspect isolated airway resistance, diagnose a cuff leak, and assume circuit disconnection—do not fit the stated findings or would delay the indicated assessment or treatment.

87. A — When both peak and plateau pressures rise together, the problem lies in lung or chest-wall compliance rather than resistive pressure. This makes suspect reduced respiratory-system compliance the single best response. The alternatives—diagnose a cuff leak, assume circuit disconnection, and suspect isolated airway resistance—do not fit the stated findings or would delay the indicated assessment or treatment.

88. D — A widened peak-to-plateau difference indicates higher resistive pressure from bronchospasm, secretions, tube narrowing, or circuit obstruction. This makes suspect increased airway resistance the single best response. The alternatives—suspect worsening static compliance, diagnose pulmonary edema from plateau alone, and reduce PEEP automatically—do not fit the stated findings or would delay the indicated assessment or treatment.

89. D — A widened peak-to-plateau difference indicates higher resistive pressure from bronchospasm, secretions, tube narrowing, or circuit obstruction. This makes suspect increased airway resistance the single best response. The alternatives—diagnose pulmonary edema from plateau alone, reduce PEEP automatically, and suspect worsening static compliance—do not fit the stated findings or would delay the indicated assessment or treatment.

90. B — Incomplete exhalation causes dynamic hyperinflation. Lowering rate or tidal volume and increasing inspiratory flow can lengthen expiration. This makes lengthen expiratory time the single best response. The alternatives—increase respiratory rate, increase tidal volume, and shorten expiratory time—do not fit the stated findings or would delay the indicated assessment or treatment.

91. A — Incomplete exhalation causes dynamic hyperinflation. Lowering rate or tidal volume and increasing inspiratory flow can lengthen expiration. This makes lengthen expiratory time the single best response. The alternatives—increase tidal volume, shorten expiratory time, and increase respiratory rate—do not fit the stated findings or would delay the indicated assessment or treatment.

92. C — Low tidal volumes based on predicted body weight and limited plateau pressure reduce ventilator-induced lung injury. This makes use lung-protective low tidal volume ventilation the single best response. The alternatives—use large tidal volumes to normalize carbon dioxide, eliminate PEEP, and target very high plateau pressures—do not fit the stated findings or would delay the indicated assessment or treatment.

93. C — Low tidal volumes based on predicted body weight and limited plateau pressure reduce ventilator-induced lung injury. This makes use lung-protective low tidal volume ventilation the single best response. The alternatives—eliminate PEEP, target very high plateau pressures, and use large tidal volumes to normalize carbon dioxide—do not fit the stated findings or would delay the indicated assessment or treatment.

94. A — Missed efforts arise when patient effort cannot overcome intrinsic PEEP or an insensitive trigger. Correcting those causes improves synchrony. This makes make the trigger more sensitive after checking auto-PEEP the single best response. The alternatives—make triggering less sensitive, increase sedation without assessment, and disconnect monitoring alarms—do not fit the stated findings or would delay the indicated assessment or treatment.

95. D — Missed efforts arise when patient effort cannot overcome intrinsic PEEP or an insensitive trigger. Correcting those causes improves synchrony. This makes make the trigger more sensitive after checking auto-PEEP the single best response. The alternatives—increase sedation without assessment, disconnect monitoring alarms, and make triggering less sensitive—do not fit the stated findings or would delay the indicated assessment or treatment.

96. B — A spontaneous breathing trial directly tests whether the patient can sustain ventilation with minimal assistance. This makes conduct a spontaneous breathing trial the single best response. The alternatives—perform bronchoscopy routinely, raise mandatory rate, and paralyze the patient—do not fit the stated findings or would delay the indicated assessment or treatment.

97. C — A spontaneous breathing trial directly tests whether the patient can sustain ventilation with minimal assistance. This makes conduct a spontaneous breathing trial the single best response. The alternatives—raise mandatory rate, paralyze the patient, and perform bronchoscopy routinely—do not fit the stated findings or would delay the indicated assessment or treatment.

98. B — Beta-agonists can cause skeletal muscle tremor and tachycardia. Therapy should be reassessed against response and adverse effects. This makes reassess dose and treatment frequency the single best response. The alternatives—double every dose automatically, add another beta agonist immediately, and stop all respiratory assessment—do not fit the stated findings or would delay the indicated assessment or treatment.

99. A — Beta-agonists can cause skeletal muscle tremor and tachycardia. Therapy should be reassessed against response and adverse effects. This makes reassess dose and treatment frequency the single best response. The alternatives—add another beta agonist immediately, stop all respiratory assessment, and double every dose automatically—do not fit the stated findings or would delay the indicated assessment or treatment.

100. D — Mouth rinsing reduces local drug deposition and the risk of dysphonia and oral candidiasis; inhaled corticosteroids are controllers, not rescue drugs. This makes rinse the mouth after each dose the single best response. The alternatives—use it only for immediate rescue, swallow residual medication, and stop it whenever symptoms improve for one day—do not fit the stated findings or would delay

101. B — Mouth rinsing reduces local drug deposition and the risk of dysphonia and oral candidiasis; inhaled corticosteroids are controllers, not rescue drugs. This makes rinse the mouth after each dose the single best response. The alternatives—swallow residual medication, stop it whenever symptoms improve for one day, and use it only for immediate rescue—do not fit the stated findings or would delay

102. C — Dornase alfa reduces sputum viscosity by cleaving extracellular DNA. It is not a bronchodilator and should follow compatible administration guidance. This makes administer it separately as prescribed the single best response. The alternatives—mix it with every nebulized medication, use it as a rapid bronchodilator, and replace all airway clearance therapy—do not fit the stated findings or would delay the indicated

103. D — Dornase alfa reduces sputum viscosity by cleaving extracellular DNA. It is not a bronchodilator and should follow compatible administration guidance. This makes administer it separately as prescribed the single best response. The alternatives—use it as a rapid bronchodilator, replace all airway clearance therapy, and mix it with every nebulized medication—do not fit the stated findings or would delay the indicated

104. A — Helium's low density can reduce turbulent resistance and work of breathing through a narrowed large airway, but it remains a bridge. This makes consider a helium-oxygen mixture the single best response. The alternatives—use nitrogen in place of helium, expect heliox to correct inflammation directly, and use it for every hypoxemic patient—do not fit the stated findings or would delay the

105. C — Helium's low density can reduce turbulent resistance and work of breathing through a narrowed large airway, but it remains a bridge. This makes consider a helium-oxygen mixture the single best response. The alternatives—expect heliox to correct inflammation directly, use it for every hypoxemic patient, and use nitrogen in place of helium—do not fit the stated findings or would delay the

106. D — Inhaled nitric oxide selectively dilates ventilated pulmonary vessels, improving ventilation-perfusion matching and reducing pulmonary vascular resistance. This makes use inhaled nitric oxide when indicated the single best response. The alternatives—administer carbon monoxide, replace oxygen with nitrogen, and use aerosolized saline as a vasodilator—do not fit the stated findings or would delay the indicated assessment or treatment.

107. B — Inhaled nitric oxide selectively dilates ventilated pulmonary vessels, improving ventilation-perfusion matching and reducing pulmonary vascular resistance. This makes use inhaled nitric oxide when indicated the single best response. The alternatives—replace oxygen with nitrogen, use aerosolized saline as a vasodilator, and administer carbon monoxide—do not fit the stated findings or would delay the indicated assessment or treatment.

108. A — Exogenous surfactant lowers alveolar surface tension, improves compliance, and reduces collapse in premature infants with surfactant deficiency. This makes administer exogenous surfactant per protocol the single best response. The alternatives—give a loop diuretic as replacement, withhold positive pressure in all cases, and use a mucolytic as surfactant—do not fit the stated findings or would delay the indicated assessment or treatment.

109. B — Exogenous surfactant lowers alveolar surface tension, improves compliance, and reduces collapse in premature infants with surfactant deficiency. This makes administer exogenous surfactant per protocol the single best response. The alternatives—withhold positive pressure in all cases, use a mucolytic as surfactant, and give a loop diuretic as replacement—do not fit the stated findings or would delay the indicated assessment or treatment.

110. D — Corticosteroid reduces subglottic inflammation, while nebulized epinephrine provides temporary mucosal vasoconstriction in moderate or severe croup. This makes give corticosteroid and nebulized epinephrine as indicated the single best response. The alternatives—perform routine blind suctioning, administer a mucolytic only, and force the child to lie flat—do not fit the stated findings or would delay the indicated assessment or treatment.

111. A — Corticosteroid reduces subglottic inflammation, while nebulized epinephrine provides temporary mucosal vasoconstriction in moderate or severe croup. This makes give corticosteroid and nebulized epinephrine as indicated the single best response. The alternatives—administer a mucolytic only, force the child to lie flat, and perform routine blind suctioning—do not fit the stated findings or would delay the indicated assessment or treatment.

112. C — A short-acting inhaled beta agonist rapidly reverses bronchospasm; oxygen and systemic corticosteroid are added according to severity. This makes administer an inhaled short-acting bronchodilator the single best response. The alternatives—begin a long-acting bronchodilator alone for rescue, withhold oxygen despite hypoxemia, and use antibiotics routinely—do not fit the stated findings or would delay the indicated assessment or treatment.

113. C — A short-acting inhaled beta agonist rapidly reverses bronchospasm; oxygen and systemic corticosteroid are added according to severity. This makes administer an inhaled short-acting bronchodilator the single best response. The alternatives—withhold oxygen despite hypoxemia, use antibiotics routinely, and begin a long-acting bronchodilator alone for rescue—do not fit the stated findings or would delay the indicated assessment or treatment.

114. A — Hypoxemia must be treated. Controlled titration and reassessment reduce the risk of excessive oxygen while ensuring adequate tissue oxygenation. This makes titrate oxygen to the prescribed target and reassess the single best response. The alternatives—withhold oxygen completely, give uncontrolled

maximal oxygen without monitoring, and use carbon dioxide inhalation—do not fit the stated findings or would delay the indicated assessment or

115. D — Hypoxemia must be treated. Controlled titration and reassessment reduce the risk of excessive oxygen while ensuring adequate tissue oxygenation. This makes titrate oxygen to the prescribed target and reassess the single best response. The alternatives—give uncontrolled maximal oxygen without monitoring, use carbon dioxide inhalation, and withhold oxygen completely—do not fit the stated findings or would delay the indicated assessment or

116. B — Positive airway pressure improves recruitment and cardiac loading conditions while definitive therapy addresses hydrostatic fluid accumulation. This makes support oxygenation and positive pressure while treating cardiac cause the single best response. The alternatives—perform postural drainage as primary therapy, give routine mucolytic treatment, and remove all airway pressure—do not fit the stated findings or would delay the indicated assessment or treatment.

117. D — Positive airway pressure improves recruitment and cardiac loading conditions while definitive therapy addresses hydrostatic fluid accumulation. This makes support oxygenation and positive pressure while treating cardiac cause the single best response. The alternatives—give routine mucolytic treatment, remove all airway pressure, and perform postural drainage as primary therapy—do not fit the stated findings or would delay the indicated assessment or treatment.

118. A — This pattern indicates tension pneumothorax with obstructive shock. Immediate decompression is required rather than delaying for imaging. This makes activate emergency decompression response the single best response. The alternatives—wait for routine spirometry, increase tidal volume, and begin incentive spirometry—do not fit the stated findings or would delay the indicated assessment or treatment.

119. B — This pattern indicates tension pneumothorax with obstructive shock. Immediate decompression is required rather than delaying for imaging. This makes activate emergency decompression response the single best response. The alternatives—increase tidal volume, begin incentive spirometry, and wait for routine spirometry—do not fit the stated findings or would delay the indicated assessment or treatment.

120. C — Supportive oxygen treats hypoxemia while imaging and medical management address the vascular obstruction. This makes provide oxygen and expedite definitive evaluation the single best response. The alternatives—perform routine chest percussion, administer surfactant, and delay assessment until sputum develops—do not fit the stated findings or would delay the indicated assessment or treatment.

121. B — Supportive oxygen treats hypoxemia while imaging and medical management address the vascular obstruction. This makes provide oxygen and expedite definitive evaluation the single best response. The alternatives—administer surfactant, delay assessment until sputum develops, and perform routine chest percussion—do not fit the stated findings or would delay the indicated assessment or treatment.

122. D — Safe transport requires anticipation of equipment failure and sufficient gas, power, monitoring, and emergency airway capability. This makes verify oxygen supply, battery, airway equipment, and monitoring the single best response. The alternatives—disconnect alarms for convenience, transport without a backup ventilation device, and empty the oxygen cylinder first—do not fit the stated findings or would delay the indicated assessment or treatment.

123. C — Safe transport requires anticipation of equipment failure and sufficient gas, power, monitoring, and emergency airway capability. This makes verify oxygen supply, battery, airway equipment, and monitoring the single best response. The alternatives—transport without a backup ventilation device, empty the oxygen cylinder first, and disconnect alarms for convenience—do not fit the stated findings or would delay the indicated assessment or treatment.

124. A — Pulmonary rehabilitation combines exercise, education, and self-management to improve function and reduce symptoms despite limited changes in spirometry. This makes recommend supervised pulmonary rehabilitation the single best response. The alternatives—prescribe prolonged inactivity, use antibiotics continuously, and avoid all resistance exercise—do not fit the stated findings or would delay the indicated assessment or treatment.

125. A — Pulmonary rehabilitation combines exercise, education, and self-management to improve function and reduce symptoms despite limited changes in spirometry. This makes recommend supervised pulmonary rehabilitation the single best response. The alternatives—use antibiotics continuously, avoid all resistance exercise, and prescribe prolonged inactivity—do not fit the stated findings or would delay the indicated assessment or treatment.

126. B — Behavioral support plus approved medication generally improves quit success compared with either approach alone. This makes combine counseling with appropriate pharmacotherapy the single best response. The alternatives—recommend abrupt counseling cessation, use oxygen as cessation therapy, and delay support until severe disease—do not fit the stated findings or would delay the indicated assessment or treatment.

127. C — Behavioral support plus approved medication generally improves quit success compared with either approach alone. This makes combine counseling with appropriate pharmacotherapy the single best response. The alternatives—use oxygen as cessation therapy, delay support until severe disease, and recommend abrupt counseling cessation—do not fit the stated findings or would delay the indicated assessment or treatment.

128. D — Exhaled gas must pass around the tube and through the upper airway, so cuff deflation and patency are essential. This makes ensure cuff deflation and upper-airway patency the single best response. The alternatives—inflate the cuff fully before placement, occlude the expiratory pathway permanently, and use the valve during complete airway obstruction—do not fit the stated findings or would delay the

129. C — Exhaled gas must pass around the tube and through the upper airway, so cuff deflation and patency are essential. This makes ensure cuff deflation and upper-airway patency the single best response. The alternatives—occlude the expiratory pathway permanently, use the valve during complete

airway obstruction, and inflate the cuff fully before placement—do not fit the stated findings or would delay the

130. D — Safe assistance requires preparation for hypoxemia, bleeding, sedation effects, and airway emergencies throughout the procedure. This makes verify consent, oxygenation, suction, monitoring, and emergency readiness the single best response. The alternatives—remove all monitoring, give food immediately beforehand, and disable suction equipment—do not fit the stated findings or would delay the indicated assessment or treatment.

131. B — Safe assistance requires preparation for hypoxemia, bleeding, sedation effects, and airway emergencies throughout the procedure. This makes verify consent, oxygenation, suction, monitoring, and emergency readiness the single best response. The alternatives—give food immediately beforehand, disable suction equipment, and remove all monitoring—do not fit the stated findings or would delay the indicated assessment or treatment.

132. A — Acute respiratory deterioration after pleural drainage can indicate pneumothorax and warrants prompt assessment and imaging. This makes assess immediately for pneumothorax the single best response. The alternatives—encourage unmonitored ambulation, perform a methacholine challenge, and assume anxiety without assessment—do not fit the stated findings or would delay the indicated assessment or treatment.

133. B — Acute respiratory deterioration after pleural drainage can indicate pneumothorax and warrants prompt assessment and imaging. This makes assess immediately for pneumothorax the single best response. The alternatives—perform a methacholine challenge, assume anxiety without assessment, and encourage unmonitored ambulation—do not fit the stated findings or would delay the indicated assessment or treatment.

134. D — Head extension with chin lift moves the tongue away from the posterior pharynx and is appropriate when cervical injury is not suspected. This makes perform a head-tilt chin-lift the single best response. The alternatives—place the patient prone, apply abdominal thrusts immediately, and insert a chest tube—do not fit the stated findings or would delay the indicated assessment or treatment.

135. A — Head extension with chin lift moves the tongue away from the posterior pharynx and is appropriate when cervical injury is not suspected. This makes perform a head-tilt chin-lift the single best response. The alternatives—apply abdominal thrusts immediately, insert a chest tube, and place the patient prone—do not fit the stated findings or would delay the indicated assessment or treatment.

136. C — The jaw-thrust can open the upper airway while minimizing cervical movement in a patient with possible spinal injury. This makes use a jaw-thrust while stabilizing the neck the single best response. The alternatives—perform full neck extension, place a pillow under the neck, and rotate the head sharply—do not fit the stated findings or would delay the indicated assessment or treatment.

137. C — The jaw-thrust can open the upper airway while minimizing cervical movement in a patient with possible spinal injury. This makes use a jaw-thrust while stabilizing the neck the single best

response. The alternatives—place a pillow under the neck, rotate the head sharply, and perform full neck extension—do not fit the stated findings or would delay the indicated assessment or treatment.

138. B — Excess cuff pressure can impair tracheal mucosal perfusion. The cuff should seal the airway at the lowest effective pressure. This makes remove air to the safe occlusive range the single best response. The alternatives—inflate until no pilot balloon compliance remains, deflate the cuff completely during ventilation, and advance the tube into a main bronchus—do not fit the stated findings or

139. D — Excess cuff pressure can impair tracheal mucosal perfusion. The cuff should seal the airway at the lowest effective pressure. This makes remove air to the safe occlusive range the single best response. The alternatives—deflate the cuff completely during ventilation, advance the tube into a main bronchus, and inflate until no pilot balloon compliance remains—do not fit the stated findings or

140. A — Clinical evidence of retained secretions supports suctioning. Preoxygenation and appropriate technique reduce procedure-related hypoxemia and trauma. This makes preoxygenate as appropriate and suction the single best response. The alternatives—schedule suction every hour regardless of need, instill saline routinely before suction, and increase cuff pressure instead—do not fit the stated findings or would delay the indicated assessment or treatment.