Paramedic Care: Principles & Practice V. 1-5, 5e (Bledsoe) Volume 1 Introduction to Advanced Prehospital Care

Chapter 1 Introduction to Paramedicine

What is one of the emerging roles and responsibilities of a paramedic in the 21st century?
 A) Third-party biller
 B) Managed health care
 C) Health promotion
 D) Internet education
 Answer: C
 Diff: 1 Page Ref: 4
 Standard: Preparatory (EMS Systems)
 Objective: 4

2) Safety inspections, accident prevention, and medical screening of employees are some of the responsibilities for paramedics working in:

A) industrial medicine.
B) community clinics.
C) correctional institutions.
D) sports medicine.
Answer: A
Diff: 1 Page Ref: 8
Standard: Preparatory (EMS Systems)
Objective: 5

3) Which of the following best describes the initial education program of the paramedic?A) It addresses everything one needs to know to practice paramedicine.

B) It is a rite of passage, but information is inconsistent with how things really should be done.

C) It is the base and beginning of one's professional education, not the end.

D) Lectures prepare students, but all learning occurs on the job during the internship phase. Answer: C

Diff: 1 Page Ref: 5 Standard: Preparatory (EMS Systems) Objective: 3

4) Which of the following best describes the paramedic's professional obligation?

A) Acceptance and adherence to a code of professional ethics and etiquette

B) Placing the system's well-being above that of the patient

C) Absolute adherence to medical protocols

D) Following long-standing traditions in practice

Answer: A

Diff: 2 Page Ref: 6

Standard: Preparatory (EMS Systems) Objective: 3 5) A major advance in the education of out-of-hospital was the:
A) formation of the National Association of Emergency Medical Technicians.
B) 2009 publication *National EMS Services Education Standards*.
C) passage of the Health Insurance Portability and Accountability Act (HIPAA).
D) establishment of the National Registry computer-based certification exam.
Answer: B
Diff: 1 Page Ref: 5
Standard: Preparatory (EMS Systems)
Objective: 4
6) Which of the following statements about a paramedic's skill competency is TRUE?
A) High-frequency, low-criticality skills should be reviewed often.

B) Low-frequency, high-criticality skills should be reviewed often.
B) Low-frequency, high-criticality skills should be rarely reviewed.
C) All skills should be reviewed equally, regardless of criticality.
D) Frequent review of infrequently used skills is critical to ensure competency.
Answer: D
Diff: 1 Page Ref: 5
Standard: Preparatory (EMS Systems)
Objective: 3

7) The paramedic's right to care for patients, administer medications, and perform other related tasks falls on the license of:
A) the EMS system medical director.
B) the state secretary of health.
C) the receiving hospital personnel.
D) the state medical director.
Answer: A
Diff: 1 Page Ref: 4
Standard: Preparatory (EMS Systems)
Objective: 4

8) Many professional sports teams have found paramedics to be effective complements to their:

A) team physicians.
B) physical therapists.
C) athletic trainers.
D) rehabilitation programs.
Answer: C
Diff: 1 Page Ref: 8
Standard: Preparatory (EMS Systems)
Objective: 5

9) Paramedics should always provide care:
A) with the intent of transporting all patients.
B) only when there is a legitimate patient complaint.
C) without regard to a patient's ability to pay.
D) with the goal of minimizing on-scene time.
Answer: C
Diff: 1 Page Ref: 4
Standard: Preparatory (EMS Systems)
Objective: 4

10) The paramedic's role has expanded to include ______ because of the need to move ill/injured patients from one health care facility to another for specialized care.
A) hospital emergency departments
B) critical care transport
C) corrections medicine
D) helicopter EMS
Answer: B
Diff: 1 Page Ref: 6
Standard: Preparatory (EMS Systems)
Objective: 4

11) Which of the following best characterizes the professional development of a paramedic?
A) It is a career-long pursuit.
B) It is focused on public education efforts.
C) It is regulated by the system medical director and state agency.
D) It is focused on illness and injury prevention.
Answer: A
Diff: 1 Page Ref: 5
Standard: Preparatory (EMS Systems)
Objective: 3

12) Which of the following best describes the paramedic's expected level of functioning in the dynamic prehospital setting?
A) Acts independently
B) Under direct supervision of the medical director
C) Under telephone or radio supervision by nursing personnel
D) Under direct supervision of fire command
Answer: A
Diff: 1 Page Ref: 5
Standard: Preparatory (EMS Systems)
Objective: 3

13) Which of the following aspects of the paramedic's work most appropriately falls into the category of public health?

A) Administering care to a patient who has suffered a heart attack

B) Providing life-saving measures after a traffic accident

C) Educating the public on illness prevention

D) Taking steps to prevent a terrorist attack

Answer: C

Diff: 1 Page Ref: 5 Standard: Preparatory (EMS Systems) Objective: 4

14) To legally function as a paramedic, one must:

A) have successfully completed an accredited EMT education program.

B) have fulfilled the specific requirements of an appropriate credentialing body.

C) strive to maintain quality health care, regardless of cost or impact on one's EMS system.

D) be able to function independently in a nonstructured, constantly changing environment.

Answer: B

Diff: 1 Page Ref: 4

Standard: Preparatory (EMS Systems)

Objective: 3

15) Many traditional EMS treatments and practices have been abandoned or refined because of:

A) research.
B) patient complaints.
C) legislation.
D) lawsuits.
Answer: A
Diff: 1 Page Ref: 6
Standard: Preparatory (EMS Systems)
Objective: 4

16) The highest level of prehospital care provider in the United States is a(n):
A) emergency medical responder.
B) paramedic.
C) advanced EMT.
D) emergency medical technician.
Answer: B
Diff: 1 Page Ref: 3
Standard: Preparatory (EMS Systems)
Objective: 2

17) To practice, paramedics must be approved by a state or provincial agency and the: A) National Association of EMTs. B) National Registry of EMTs. C) EMS system's medical director. D) state medical director. Answer: C Diff: 1 Page Ref: 4 Standard: Preparatory (EMS Systems) Objective: 3 18) Which of the following is a desirable paramedic characteristic? A) The ability to give medical advice B) A commanding presence on the scene C) The ability to establish rapport with a wide variety of patients D) The ability to exactly follow protocols on each and every call Answer: C Diff: 1 Page Ref: 5 Standard: Preparatory (EMS Systems) Objective: 3 19) Which of the following agencies developed and published the 2009 EMS Instructional *Guidelines*?

A) The National Registry of Emergency Medical Technicians
B) The National Association of State EMS Training Coordinators
C) The National Association of Emergency Medical Technicians
D) The United States Department of Transportation
Answer: D
Diff: 1 Page Ref: 5
Standard: Preparatory (EMS Systems)
Objective: 3

20) Where do many of the practices and techniques of tactical EMS come from?
A) Police
B) Firefighters
C) Military
D) Critical care medics
Answer: C
Diff: 1 Page Ref: 7
Standard: Preparatory (EMS Systems)
Objective: 5

21) Which of these terms is a synonym of "mobile integrated health care?"
A) industrial medicine
B) illness prevention
C) corrections medicine
D) community paramedicine
Answer: D
Diff: 1 Page Ref: 4
Standard: Preparatory (EMS Systems)
Objective: 1

Paramedic Care: Principles & Practice V. 1-5, 5e (Bledsoe) Volume 2 Patient Assessment

Chapter 1 Scene Size-Up

You arrive at a location and begin to read the scene by:
 A) approaching the patient.
 B) observing the immediate surroundings.
 C) conducting a focused exam.
 D) addressing life threats.
 Answer: B
 Diff: 1 Page Ref: 3
 Standard: Assessment (Scene Size-Up)
 Objective: 2

2) Which of the following is a potentially life-threatening patient complaint?
A) Fractures of the tibia and radius
B) Asthma
C) Headache
D) Chest pain
Answer: D
Diff: 2 Page Ref: 15-16
Standard: Assessment (Scene Size-Up)
Objective: 7

3) At the scene of a multiple-vehicle collision, which of the following actions should you take first?

A) Wait for additional resources to arrive.
B) Treat the most seriously injured patient.
C) Quickly scan the scene to count patients.
D) Go directly to the first patient you see.
Answer: C
Diff: 2 Page Ref: 14-15
Standard: Assessment (Scene Size-Up)
Objective: 6

4) A scene size-up is performed for all of the following reasons EXCEPT:

A) to assess the mechanism of injury.

B) to assess a baseline mental status.

C) to provide information that will guide your medical care.

D) to assess the need for additional resources. Answer: B Diff: 1 Page Ref: 3 Standard: Assessment (Scene Size-Up) Objective: 2 5) Which of the following is usually the best source of information about an alert and oriented patient?

A) The patient
B) Visual cues
C) Diagnostic tests
D) Family members
Answer: A
Diff: 1 Page Ref: 16
Standard: Assessment (Scene Size-Up)
Objective: 7

6) Which of the following is NOT a consideration when evaluating the mechanism of injury?
A) Mass and velocity of objects involved
B) Whether the mechanism was blunt or penetrating
C) Direction of impact
D) Whether it is a rural or an urban setting
Answer: D
Diff: 2 Page Ref: 15-16
Standard: Assessment (Scene Size-Up)
Objective: 7

7) When approaching a potential crime scene, you should:
A) enter the scene if no signs of danger are noted.
B) quickly enter the scene, retrieve the victim, and withdraw to the vehicle.
C) park away from the scene until the police arrive and secure the scene.
D) park and wait in front of the scene so the victim knows you are there.
Answer: C
Diff: 2 Page Ref: 10
Standard: Assessment (Scene Size-Up)
Objective: 5

8) Which of the following best describes when you should perform a scene size-up?
A) Once you arrive at the patient's side
B) Throughout your time on the scene
C) When you initially arrive at the scene
D) As you are leaving the scene
Answer: B
Diff: 1 Page Ref: 3
Standard: Assessment (Scene Size-Up)
Objective: 2

9) A paramedic should wear a properly fitted HEPA mask when evaluating a patient exhibiting signs and symptoms of:

A) influenza.
B) asthma.
C) COPD.
D) tuberculosis.
Answer: D
Diff: 1 Page Ref: 4
Standard: Assessment (Scene Size-Up)
Objective: 4

10) A car has struck a pedestrian at about 45 mph. While assessing the patient, you note bilateral tibia and fibula fractures. Which of the following best describes why the patient should be transported to a trauma center?

A) Pain from the fractures cannot be treated in the prehospital setting.

B) Other serious injuries are likely.

C) These fractures cannot be treated in a community hospital.

D) Fractures always require immediate surgery.

Answer: B

Diff: 2 Page Ref: 16 Standard: Assessment (Scene Size-Up) Objective: 8

11) Which of the following is NOT an example of a mechanism of injury?

A) An episode of chest pressure
B) A fall from a ladder
C) A low-speed motor vehicle collision
D) A high-velocity gunshot wound
Answer: A
Diff: 1 Page Ref: 15-16
Standard: Assessment (Scene Size-Up)
Objective: 1

12) Your patient is a 75-year-old man who is alert and responds to your questions. Which of the following is the best source of information about this patient?
A) Family or friends
B) The medical record
C) The patient
D) The physician
Answer: C
Diff: 1 Page Ref: 16
Standard: Assessment (Scene Size-Up)
Objective: 7

13) A paramedic should wear protective eyewear when caring for a patient who is:
A) coughing up blood-tinged sputum.
B) complaining of dizziness.
C) unresponsive.
D) all of the above.
Answer: A
Diff: 1 Page Ref: 4
Standard: Assessment (Scene Size-Up)
Objective: 4
14) All of the following mechanisms of injury yield a high level of suspicion for life-threatening injury EXCEPT:
A) a stab wound distal to the knee.
B) a collision between a motorcycle and a pedestrian.
C) falling off the top of a 30-foot extension ladder.
D) a patient ejection from a motor vehicle after a collision.

Answer: A

Diff: 2 Page Ref: 15-16 Standard: Assessment (Scene Size-Up)

Objective: 7

15) Which of the following provides a clue to the nature of an illness?
A) Medication bottles on the nightstand
B) Length of a knife
C) Caliber of ammunition
D) Surface on which a patient fell
Answer: A
Diff: 1 Page Ref: 16
Standard: Assessment (Scene Size-Up)
Objective: 7

16) Which of the following is most likely to result in life-threatening hemorrhage?
A) Epistaxis
B) Lacerated femoral artery
C) Fractured radius and ulna
D) Bleeding hemorrhoids
Answer: B
Diff: 1 Page Ref: 15
Standard: Assessment (Scene Size-Up)
Objective: 7

17) Which of the following factors may influence your index of suspicion of a patient's condition? Select the letter choice with the best combination of the following factors:

1. Age

2. Gender

3. Race

4. Forces involved with the mechanism of injury

A) 1, 2, and 4
B) 1, 3, and 4
C) 1, 2, 3, and 4
D) 4 only
Answer: D
Diff: 2 Page Ref: 15
Standard: Assessment (Scene Size-Up)
Objective: 7

18) Components of a scene size-up include all of the following EXCEPT:
A) patient's chief complaint.
B) number of patients.
C) mechanism of injury.
D) dangers to bystanders.
Answer: A
Diff: 1 Page Ref: 3
Standard: Assessment (Scene Size-Up)
Objective: 3

19) You find an adult patient lying supine on the sidewalk after being struck by a vehicle traveling at 10 mph. The patient is alert with stable vital signs. The mechanism of injury and initial patient presentation are most consistent with suspected:

A) pneumothorax.
B) closed-head injury.
C) abdominal trauma.
D) lower extremity trauma.
Answer: D
Diff: 2 Page Ref: 15-16
Standard: Assessment (Scene Size-Up)
Objective: 7

20) When responding to calls involving two-vehicle collisions, you must always suspect:
A) multiple patients.
B) patients with altered mental status.
C) flail chest.
D) severe lower extremity injuries.
Answer: A
Diff: 1 Page Ref: 14
Standard: Assessment (Scene Size-Up)
Objective: 6

21) You respond to a scene where gunshots have been heard, and there is a report of a "man down." You should enter the scene when:A) you arrive on the scene.

B) dispatch informs you the scene is safe. C) you observe the gunman fleeing the scene. D) police officers arrive and secure the scene. Answer: D Diff: 1 Page Ref: 10 Standard: Assessment (Scene Size-Up) Objective: 5 22) As the first unit on the scene of a mass-casualty incident, you and your partner should: A) stay together, assuming a joint command role. B) split up, with one assuming a command role, the other a triage role. C) stay together, both locating and triaging patients. D) split up, with both initiating patient triage. Answer: B Diff: 2 Page Ref: 14 Standard: Assessment (Scene Size-Up) Objective: 6 23) When responding to a domestic dispute, you should: A) have your dispatcher tell the patient to come outside. B) wait for law enforcement to arrive. C) refuse the call unless law enforcement is on the scene. D) determine whether or not the assailant is still on the scene. Answer: B Diff: 2 Page Ref: 10 Standard: Assessment (Scene Size-Up) Objective: 5 24) Which of the following best describes why you should call for additional assistance when dealing with multiple patients? A) Risks to each provider decrease as more responders arrive on the scene. B) You are responsible only for command and triage.

C) You cannot safely and effectively treat all the patients.

D) Fair distribution of workload is required by most unions.

Answer: C

Diff: 2 Page Ref: 14

Standard: Assessment (Scene Size-Up) Objective: 6 25) You are treating a 27-year-old asthmatic patient outside a bar when a growing crowd becomes hostile and unruly. To protect yourself, your crew, and your patient, you should:
A) move the patient into the bar.
B) use your vehicle to disperse the crowd.
C) exit the scene, leaving the patient behind.
D) remove yourselves and the patient from the scene.
Answer: D
Diff: 1 Page Ref: 10
Standard: Assessment (Scene Size-Up)
Objective: 5

26) Which of the following senses should a paramedic use to recognize hazards at the scene of an emergency?
A) Smell
B) Hearing
C) Sight
D) All of the above
Answer: D
Diff: 1 Page Ref: 4
Standard: Assessment (Scene Size-Up)
Objective: 2

Paramedic Care: Principles & Practice V. 1-5, 5e (Bledsoe) Volume 3 Medical Emergencies

Chapter 1 Pulmonology

Which of the following is the most important intrinsic risk factor for respiratory disease?
 A) Environment
 B) Smoking
 C) Sedentary lifestyle
 D) Family history
 Answer: D
 Diff: 1 Page Ref: 3
 Standard: Medicine (Respiratory)
 Objective: 2
 2) Air entering and leaving the lungs via inspiration and expiration is known as:

A) ventilation.
B) respirations.
C) perfusion.
D) oxygenation.
Answer: A
Diff: 1 Page Ref: 8
Standard: Medicine (Respiratory)
Objective: 1, 3

3) The diaphragm is controlled by the _____ nerve.A) vagusB) olfactory

C) abducens D) phrenic Answer: D Diff: 1 Page Ref: 7-8 Standard: Medicine (Respiratory) Objective: 3, 4

4) An example of diffusion in the respiratory system is movement of:
A) oxygen from the alveoli into the pulmonary capillaries.
B) air from the outside environment into the lungs.
C) oxygen from the tissues into the systemic capillaries.
D) carbon dioxide from the alveoli into the pulmonary capillaries.
Answer: A
Diff: 2 Page Ref: 11
Standard: Medicine (Respiratory)
Objective: 1, 4

5) Airway resistance is increased by:
A) sympathetic nervous system stimulation.
B) decreased elasticity of the chest wall.
C) anticholinergic drugs.
D) bronchospasm.
Answer: D
Diff: 2 Page Ref: 9
Standard: Medicine (Respiratory)
Objective: 4

6) Which of the following patients are at risk for the most common cause of upper airway obstruction?

A) 4-year-old male with croup
B) 21-year-old female unconscious and supine on the floor
C) 22-year-old female stung by a wasp
D) 5-year-old female with epiglottitis
Answer: B
Diff: 2 Page Ref: 25
Standard: Medicine (Respiratory)
Objective: 7

7) Normal tidal volume in an average 70 kg adult is approximately _______e.
A) 1,500
B) 1,000
C) 750
D) 500
Answer: D
Diff: 1 Page Ref: 9
Standard: Medicine (Respiratory)
Objective: 4

8) After a normal inspiration and expiration, an adult patient has about 2,400 mL of air remaining in the lungs, known as the:
A) expiratory reserve volume.
B) residual volume.
C) functional residual capacity.
D) vital capacity.
Answer: C
Diff: 1 Page Ref: 9
Standard: Medicine (Respiratory)
Objective: 4

9) A 19-year-old female with difficulty breathing produces a peak expiratory flow rate of 425 lpm, indicating:
A) moderate bronchoconstriction.
B) mild bronchoconstriction.
C) normal ventilatory state.
D) severe bronchoconstriction.
Answer: C
Diff: 2 Page Ref: 21-22
Standard: Medicine (Respiratory)
Objective: 5, 6

10) Stretch receptors in the lungs send a signal to the inspiratory center of the medulla, inhibiting its stimulation of the phrenic and intercostal nerves. This is called the ______ reflex.

A) Cushing's
B) Hering-Breuer
C) Moro
D) Cheyne-Stokes
Answer: B
Diff: 2 Page Ref: 10
Standard: Medicine (Respiratory)
Objective: 3

11) The most important factor in determining the respiratory rate is:
A) arterial pCO2.
B) arterial pO2.
C) alveolar pCO2.
D) alveolar pO2.
Answer: A
Diff: 1 Page Ref: 10
Standard: Medicine (Respiratory)
Objective: 3

12) You are working in the ED caring for a 55-year-old female with a long history of COPD. She is more short of breath today than usual and states she has an increased cough. She has a tympanic temperature of 99.8°F. You have drawn arterial blood gases with the patient on room air and when the report comes back, it shows that the patient has a pO₂ of 52 mmHg. Which of the following is most likely?

A) You have inadvertently drawn a venous sample.
B) The patient is critically hypoxic and requires assisted ventilation.
C) This is the typical value for this patient.
D) The lab performed the test incorrectly.
Answer: C
Diff: 3 Page Ref: 10-11
Standard: Medicine (Respiratory)
Objective: 3

13) Your ICU patient has ARDS with a pO₂ of 62 mmHg, despite mechanical ventilation and oxygenation. Which of the following best explains this finding?

A) It is a problem with perfusion.
B) It is a problem with ventilation.
C) It is a problem with the blood gas sample collection.
D) It is a problem with gas diffusion in the lung.
Answer: D
Diff: 3 Page Ref: 26-27
Standard: Medicine (Respiratory)
Objective: 1, 8

14) Most carbon dioxide from cellular metabolism reaches the alveoli by being transported:
A) bound to hemoglobin.
B) as bicarbonate ion.
C) dissolved in plasma.
D) as carbonic anhydrase.
Answer: B
Diff: 1 Page Ref: 12
Standard: Medicine (Respiratory)
Objective: 3

15) Pulmonary embolism is a problem of:
A) interstitial edema.
B) ventilation of lungs.
C) thickness of the respiratory membrane.
D) perfusion of the lungs.
Answer: D
Diff: 2 Page Ref: 14, 43
Standard: Medicine (Respiratory)
Objective: 4

16) Normal exhalation involves all of the following EXCEPT:
A) decreased intrathoracic volume.
B) phrenic nerve stimulation.
C) relaxation of the diaphragm.
D) elastic recoil of lung tissue.
Answer: B
Diff: 1 Page Ref: 7-8, 8-9
Standard: Medicine (Respiratory)
Objective: 3

17) Obstructive sleep apnea is a problem of the:
A) phrenic nerve.
B) upper airway.
C) medulla oblongata.
D) larynx and vocal cords.
Answer: B
Diff: 2 Page Ref: 13
Standard: Medicine (Respiratory)
Objective: 4

18) Which of the following provides evidence that a patient is using accessory muscles to breathe?

A) The patient is using his diaphragm with inspiration.B) The patient's lips are pursed.

C) There is noticeable contraction of the intercostal muscles.

D) The patient is sitting up, leaning forward to breathe.

Answer: C

Diff: 2 Page Ref: 16

Standard: Medicine (Respiratory)

Objective: 5

19) You have been called to treat a patient complaining of difficulty breathing. Which of the findings should concern you the most?

A) The patient is confused, agitated, and angry that you are trying to help him.

B) The patient is sitting in the "tripod" position.

C) The patient has a heart rate of 126.

D) The patient can speak only one to two words between breaths.

Answer: A

Diff: 3 Page Ref: 15

Standard: Medicine (Respiratory)

Objective: 6

20) Your patient complains of coughing up "greenish-brown" sputum. This is most consistent with:

A) cancer.
B) bronchitis.
C) seasonal allergies.
D) pulmonary edema.
Answer: B
Diff: 2 Page Ref: 17
Standard: Medicine (Respiratory)
Objective: 5, 6

21) As you are palpating your patient's chest, he speaks, and you can feel the vibration through the chest wall. You should document this as: A) crepitus. B) tactile fremitus. C) bronchovesicular sounds. D) a pleural friction rub. Answer: B Diff: 1 Page Ref: 18 Standard: Medicine (Respiratory) Objective: 1, 5 22) Capnometry measures the partial pressure of CO₂ in: A) venous blood. B) arterial blood. C) expired air. D) inspired air. Answer: C Diff: 1 Page Ref: 22 Standard: Medicine (Respiratory) Objective: 5 23) ETCO₂ is recorded during phase ______ of the capnogram. A) I B) II C) III D) IV Answer: C Diff: 2 Page Ref: 23 Standard: Medicine (Respiratory) Objective: 5 24) Your patient is a 23-year-old female who is 30 weeks pregnant. She choked on some cheese while eating a piece of pizza. When asked if she can speak, she replies "yes," although with some difficulty. Your next step should be to:

A) perform a series of abdominal thrusts.

B) perform a series of chest thrusts.

C) ask the patient to cough as hard as she can.

D) attempt to remove the bolus of cheese with Magill forceps.

Answer: C

Diff: 2 Page Ref: 26 Standard: Medicine (Respiratory) Objective: 7 25) Your patient is a 20-year-old male with a peanut allergy who inadvertently ate some candy containing peanuts. He is complaining of a "lump" in his throat, his voice is hoarse with mild inspiratory stridor, and he appears anxious. You are giving oxygen by nonrebreathing mask and have started an IV. Next, you should:

A) place the patient in a supine position and prepare for transtracheal ventilation.

B) administer an induction agent and a paralytic and perform endotracheal intubation.

C) administer 0.4 mg of 1:1000 epinephrine SQ and 50 mg diphenhydramine IV.

D) administer 2.5 mg albuterol by nebulizer.

Answer: C Diff: 2 Page Ref: 26 Standard: Medicine (Respiratory) Objective: 7

26) Your patient is a 60-year-old male with an acute exacerbation of COPD. You may consider giving the patient ipratropium because, in addition to reversing bronchospasm, it is helpful in:

A) reducing inflammation.
B) drying bronchial secretions.
C) expectoration of mucus.
D) stimulating the respiratory center in the medulla.
Answer: B
Diff: 2 Page Ref: 30
Standard: Medicine (Respiratory)
Objective: 8

27) Which of the following characteristics is least associated with emphysema?
A) Polycythemia
B) Cor pulmonale
C) Barrel chest appearance
D) Productive cough throughout the day
Answer: D
Diff: 2 Page Ref: 30-31
Standard: Medicine (Respiratory)
Objective: 6

28) When using CPAP in patients with COPD, in general, PEEP should be:
A) < 10 mm Hg.
B) > 10 mm Hg.
C) < 10 cm H2O.
D) > 10 cm H2O.
Answer: C
Diff: 1 Page Ref: 32
Standard: Medicine (Respiratory)
Objective: 6

29) Your patient is a 15-year-old asthmatic who has been having difficulty breathing for 45 minutes but does not have his Xopenex inhaler with him. Capnography shows an ETCO₂ of 45 mmHg. The best way to interpret this finding is:

A) this is a normal ETCO₂, indicating that this is a mild asthma attack.

B) the patient's ETCO₂ first dropped as he began to hyperventilate but now is rising again and may continue to rise to dangerous levels.

C) this is a high ETCO₂, and the patient requires immediate ventilatory assistance to prevent respiratory arrest.

D) this is a low ETCO₂ indicating that the patient is hyperventilating and thus in the early stages of an asthma attack.

Answer: B Diff: 3 Page Ref: 34 Standard: Medicine (Respiratory) Objective: 5, 6

30) Your patient is a 24-year-old male Chinese citizen on vacation in the United States. He is in moderate distress, complaining of difficulty breathing and gives a four-day history of runny nose, sore throat, fever, chills, and general malaise with a productive cough. His sputum production was significantly worse when he woke this morning, and he developed difficulty breathing this afternoon. HR = 134, BP = 132/84, RR = 26, SaO₂ = 90%. This

presentation is most consistent with:

A) pneumonia.
B) tuberculosis.
C) SARS.
D) hantavirus pulmonary syndrome.
Answer: C
Diff: 3 Page Ref: 39
Standard: Medicine (Respiratory)
Objective: 6

31) In which of the following situations is a significant amount of carboxyhemoglobin most likely to be present?

A) A patient who is being treated with nitrites for cyanide poisoning

B) A patient with COPD who is short of breath with an SpO2 of 90 percent

C) A patient found unresponsive in an apartment in which there is a gas furnace

D) A patient who inhaled anhydrous ammonia fumes

Answer: C

Diff: 2 Page Ref: 41-42

Standard: Medicine (Respiratory)

Objective: 5,7

32) Your patient is a 68-year-old male complaining of difficulty breathing for two days. He is sitting up, conscious, alert, and oriented and appears to be in mild respiratory distress. Physical examination reveals cool, dry, pink skin; he is thin with well-defined accessory muscles, and you note diffuse wheezing to all lung fields. HR = 102, BP = 136/96, RR = 20, SaO₂ = 92%. The patient gives a 20-pack-a-year history of smoking. These findings are most typical of:
A) emphysema.
B) asthma.
C) chronic bronchitis.
D) congestive heart failure.
Answer: A
Diff: 2 Page Ref: 31
Standard: Medicine (Respiratory)
Objective: 6

33) You have applied a CO-oximeter to your patient, and it is displaying an SpCO of 15 percent. Which of the following is the most appropriate interpretation of this finding?
A) This is consistent with a fatal level of carbon monoxide poisoning.
B) This is a normal reading for a smoker and nothing to worry about.
C) This is a normal reading for a nonsmoker and nothing to worry about.
D) This is consistent with mild carbon monoxide poisoning.
Answer: D
Diff: 2 Page Ref: 42
Standard: Medicine (Respiratory)
Objective: 5

34) You are working at the triage desk in the ED when a young man on crutches approaches the desk. He appears moderately short of breath. He states he had a cast put on his left leg seven days ago after surgery for a ruptured Achilles tendon. This morning, while he was watching television, he suddenly became short of breath. He has a history of asthma, for which he takes Xopenex as needed, and is taking Tylenol with codeine for pain related to his surgery. The patient's lung sounds are clear and equal, SpO₂ is 90 percent on room air, heart rate is 100 and regular, respirations are 24 and slightly labored, blood pressure is 128/88, and the patient is afebrile. These findings are most consistent with:

A) allergic reaction to codeine.

B) asthma exacerbated by recent anesthesia.

C) pneumonia secondary to recent anesthesia.

D) pulmonary embolism associated with immobilization of the lower extremity.

Answer: D

Diff: 3 Page Ref: 43

Standard: Medicine (Respiratory)

Objective: 6

35) You are caring for a patient with Guillain-Barré syndrome. The most likely cause of hypoxia in this patient would be:

A) impaired perfusion.

B) inadequate lung volume.

C) impaired ventilation.

D) increased thickness of the respiratory membrane.

Answer: C

Diff: 3 Page Ref: 45

Standard: Medicine (Respiratory)

Objective: 6,7

36) Which of the following statements about adult respiratory distress syndrome (ARDS) is FALSE?

A) PEEP is often required to adequately ventilate ARDS patients.

B) The mortality rate is 20 to 30 percent.

C) Pulmonary edema and disruption of the alveolar-capillary membrane contribute to respiratory failure in ARDS.

D) The causes of ARDS include pancreatitis, oxygen toxicity, sepsis, and tumor destruction. Answer: B

Diff: 2 Page Ref: 27

Standard: Medicine (Respiratory)

Objective: 7

37) The amount of air moved in and out of the lungs during a normal, quiet respiration is called:

A) tidal volume.

B) dead space volume.
C) inspiratory capacity.
D) functional reserve capacity.
Answer: A
Diff: 1 Page Ref: 9
Standard: Medicine (Respiratory)
Objective: 3

38) The carpopedal spasms that occur due to hyperventilation syndrome are a result of a relative ______, secondary to ______.
A) hypocalcemia, decrease in unbound calcium
B) hypercalcemia, respiratory alkalosis
C) hypocalcemia, increase in bound calcium
D) hyponatremia, respiratory alkalosis
Answer: C
Diff: 3 Page Ref: 44-45
Standard: Medicine (Respiratory)
Objective: 4, 7

39) Your patient is a 52-year-old male complaining of shortness of breath. He is sitting up, alert, and oriented and appears to be in moderate respiratory distress. He states that he "always gets a chest cold in the winter" and describes a three-week history of productive cough and increasing shortness of breath. Physical examination reveals coarse rhonchi to the upper lobes bilaterally, air movement is decreased in the bases, and his skin is cool with peripheral cyanosis. You note that he is overweight and describes an 18-pack-a-year smoking history. Based on these clinical exam findings, the most clinically relevant finding you might also expect is:

A) pursed-lipped breathing.
B) JVD, ankle edema, and hepatic congestion.
C) pulmonary edema and hypotension.
D) barrel chest and increased anterior/posterior chest diameter.
Answer: B
Diff: 3 Page Ref: 32
Standard: Medicine (Respiratory)
Objective: 6

40) An increased hydrogen ion concentration in the cerebrospinal fluid results in a(n) _____ respiratory rate.

A) erraticB) decreasedC) unchangedD) increasedAnswer: DDiff: 2Page Ref: 10Standard: Medicine (Respiratory)Objective: 3

41) Your patient is a 16-year-old male who attempted suicide. He is unconscious and apneic, lying supine on a garage floor. The family states they found the patient unconscious in the front seat of a car that was running in an enclosed garage. HR = 70, BP = 100/60, RR = 0. In addition to an IV of normal saline, which of the following is the most appropriate?

A) Intubate, remove the patient from the garage, and transport to a hospital with a hyperbaric chamber.

B) Remove the patient from the garage, initiate BVM ventilations with 100 percent oxygen, intubate, and transport to a hospital with a hyperbaric chamber.

C) Remove the patient from the garage, initiate BVM ventilations with 100 percent oxygen, intubate, and transport to the nearest facility.

D) Remove the patient from the garage, intubate, and transport to the nearest hospital. Answer: B

Diff: 3 Page Ref: 42 Standard: Medicine (Respiratory) Objective: 5, 8 42) Lung perfusion depends on all of the following EXCEPT:
A) efficient pumping of blood by the heart.
B) intact pulmonary capillaries.
C) an intact alveolar membrane.
D) adequate blood volume.
Answer: C
Diff: 2 Page Ref: 11
Standard: Medicine (Respiratory)
Objective: 3

43) Your patient is a 24-year-old male who has been an in-patient in a rehabilitation hospital following surgical fixation of a fractured pelvis. Staff reports sudden development of hypotension and severe respiratory distress about 30 minutes ago. There is no other significant history. Physical exam findings include cold, diaphoretic skin with peripheral cyanosis; jugular venous distension; clear breath sounds bilaterally; and vitals as follows: HR = 134, BP = 74/50, RR = 28, SaO₂ = 84%. Which of the following is most likely?

A) Spontaneous tension pneumothorax
B) Pulmonary embolism
C) Myocardial infarction
D) Idiopathic congestive heart failure
Answer: B
Diff: 3 Page Ref: 43
Standard: Medicine (Respiratory)
Objective: 6, 8

44) Which of the following statements about pulse oximetry is FALSE?

A) Oxygen saturation is the percentage of hemoglobin that is bound with some molecular structure.

B) Pulse oximetry values can be expected to decrease within seconds in cases of developing hypoxia.

C) Pulse oximetry should be used on all patients with respiratory complaints.

D) Pulse oximetry has the ability to noninvasively measure total hemoglobin (SpHb) in addition to SpO₂ and other parameters.

Answer: B

Diff: 1 Page Ref: 20-21 Standard: Medicine (Respiratory) Objective: 5 45) Which of the following is the most important determinant of ventilatory rate?

A) Arterial PO2
B) Venous PCO2
C) Venous PO2
D) Arterial PCO2
Answer: D
Diff: 1 Page Ref: 10
Standard: Medicine (Respiratory)
Objective: 3

46) Which of the following is the purpose of lung surfactant?

A) Destroy and remove foreign material from the alveoli.

B) Aid in the facilitated diffusion of oxygen across the alveolar membrane.

C) Decrease the surface tension of water in the alveoli.

D) Aid in the facilitated diffusion of carbon dioxide and oxygen across the alveolar membrane. Answer: C

Diff: 1 Page Ref: 6-7 Standard: Medicine (Respiratory) Objective: 3

47) You have intubated a 66-year-old female who was experiencing an acute exacerbation of her emphysema. What special consideration does this patient, with her specific pathology, require?

A) She requires hyperventilation to blow off excess CO₂.

B) Oxygen flow should be limited to 4 lpm because of the hypoxic drive common in COPD patients.

C) While ventilating, you must allow for a prolonged expiratory phase.

D) She requires frequent, deep suctioning.

Answer: C Diff: 3 Page Ref: 32 Standard: Medicine (Respiratory) Objective: 8, 9

48) Your patient is a 72-year-old female, alert and oriented, sitting up in bed at a nursing home. She is in mild respiratory distress. The staff describes a four-day history of fever, malaise, and productive cough. The patient also states that she has been experiencing chills and chest pain with deep inspiration. Physical examination reveals rales and rhonchi in the right upper lobe and warm, moist skin. HR = 116, BP = 104/76, RR = 20, SaO₂ = 93%.

Based on the clinical exam findings, the most appropriate diagnosis would be: A) pneumonia.

B) emphysema.
C) congestive heart failure.
D) chronic bronchitis.
Answer: A
Diff: 3 Page Ref: 38
Standard: Medicine (Respiratory)
Objective: 6

49) Which of the following structures FIRST allows gas exchange as air enters the lungs? A) Respiratory bronchioles B) Alveolar ducts C) Alveolar sacs D) Terminal bronchioles Answer: A Diff: 1 Page Ref: 5-6 Standard: Medicine (Respiratory) Objective: 3 50) Which of the following is NOT a role of the upper respiratory system? A) Warm inspired air B) Filter inspired air C) Carry out gas exchange with inspired air D) Humidify inspired air Answer: C Diff: 1 Page Ref: 3 Standard: Medicine (Respiratory) Objective: 3 51) Which of the following would result in an increased respiratory rate?

A) A decrease of cerebrospinal fluid PO2
B) Stimulation of chemoreceptors by an increase of PCO2
C) An increase of cerebrospinal fluid pH
D) Stimulation of baroreceptors by an increase of PCO2
Answer: B
Diff: 2 Page Ref: 10
Standard: Medicine (Respiratory)
Objective: 3

52) A 72-year-old female has a one-week history of 101°F fever, chills, and dark-brown sputum production. She also has rhonchi and rales throughout her right lung. If this condition is left untreated, it could result in:
A) cardiogenic shock.
B) chronic bronchitis.
C) septic shock.
D) pneumonia.
Answer: C
Diff: 2 Page Ref: 38
Standard: Medicine (Respiratory)
Objective: 6, 7

53) An intrinsic risk factor is one that is influenced: A) within the patient. B) outside the patient. C) by the atmosphere. D) by a carcinogen. Answer: A Diff: 2 Page Ref: 3 Standard: Medicine (Respiratory) Objective: 2 54) Ventilation is: A) the diffusion of gases at the alveoli. B) the diffusion of the gas at the cellular level. C) the mechanical process of moving air in and out of the lungs. D) done to allow the gas to escape the chest wall. Answer: C Diff: 1 Page Ref: 7 Standard: Medicine (Respiratory) Objective: 1, 3 55) The diaphragm is innervated by the: A) renal nerve. B) renic nerve. C) pulmonary nerve. D) phrenic nerve. Answer: D Diff: 2 Page Ref: 14 Standard: Medicine (Respiratory) Objective: 4 56) Lung compliance is described as: A) the ease with which the chest expands. B) the diameter of the chest wall. C) the depth at which the chest expands. D) the rate at which the chest expands. Answer: A Diff: 1 Page Ref: 9 Standard: Medicine (Respiratory)

Objective: 3

57) The average adult tidal volume is: A) 750 mL. B) 1200 mL. C) 2400 mL. D) 500 mL. Answer: D Diff: 1 Page Ref: 10 Standard: Medicine (Respiratory) Objective: 3 58) The most important determinant of ventilatory rate is: A) arterial PO. B) SpPO. C) arterial PCO₂. D) arterial NaHCO3. Answer: C Diff: 2 Page Ref: 10 Standard: Medicine (Respiratory) Objective: 3 59) A patient with COPD should present with a PO₂ of: A) 35-45 mmHg. B) 70-80 mmHg. C) 50-60 mmHg. D) 94-96 mmHg. Answer: C Diff: 1 Page Ref: 10-11 Standard: Medicine (Respiratory) Objective: 3 60) A majority of carbon dioxide in the body is transported as: A) bicarbonate ion. B) hydrogen ion. C) hemoglobin. D) plasma. Answer: A Diff: 2 Page Ref: 12 Standard: Medicine (Respiratory)

Objective: 3

61) A sudden disruption of pulmonary perfusion caused by a blood clot is known as: A) pulmonary occlusion. B) pulmonary diffusion. C) pulmonary edema. D) pulmonary embolism. Answer: D Diff: 1 Page Ref: 43 Standard: Medicine (Respiratory) Objective: 4, 6 62) Obstructive sleep apnea is an example of: A) lower airway obstruction. B) upper airway obstruction. C) COPD. D) CHF. Answer: B Diff: 1 Page Ref: 13 Standard: Medicine (Respiratory) Objective: 4 63) You are called to the home of a patient who suddenly "stopped breathing." The patient has a history of a neoplasm at C-3 and C-4. You suspect: A) impingement on the phrenic nerve. B) cervical fractures. C) lung cancer. D) myocardial infarction. Answer: A

Diff: 3 Page Ref: 14 Standard: Medicine (Respiratory) Objective: 4

64) Pulmonary shunting can be seen in patients with suspected:
A) tension pneumothorax.
B) hemothorax.
C) pulmonary embolism.
D) hypovolemic shock.
Answer: C
Diff: 2 Page Ref: 14
Standard: Medicine (Respiratory)
Objective: 4

65) Which of the following is NOT part of the respiratory status assessment?
A) Mental status
B) Color
C) Respiratory effort
D) Lung compliance
Answer: D
Diff: 1 Page Ref: 15-16
Standard: Medicine (Respiratory)
Objective: 5

66) You are assessing your respiratory patient. Of the following findings, which would concern you the most?
A) Tachycardia
B) Intercostal retractions
C) Altered mental status
D) Stridor
Answer: C
Diff: 1 Page Ref: 39
Standard: Medicine (Respiratory)
Objective: 6, 7

67) Your patient is complaining of "coughing up blood," or, in medical terms:
A) hemothorax.
B) hemoptysis.
C) neoplasm.
D) hemopulmonary spasm.
Answer: B
Diff: 1 Page Ref: 16
Standard: Medicine (Respiratory)
Objective: 1

68) You are evaluating a patient complaining of having a productive cough. The patient states the sputum is green to brown. You suspect:
A) infection.
B) inflammation.
C) allergies.
D) hemoptysis.
Answer: A
Diff: 1 Page Ref: 17

Standard: Medicine (Respiratory)

Objective: 5, 6

69) You are assessing a patient who is presenting with shortness of breath, JVD, and tracheal deviation. You suspect:
A) flail chest.
B) tracheal tugging.
C) subcutaneous emphysema.
D) tension pneumothorax.
Answer: D
Diff: 2 Page Ref: 18
Standard: Medicine (Respiratory)
Objective: 5, 6

70) Paradoxical movement is associated with:
A) tension pneumothorax.
B) hemothorax.
C) flail chest.
D) simple pneumothorax.
Answer: C
Diff: 2 Page Ref: 18
Standard: Medicine (Respiratory)
Objective: 5, 6

71) Upon examining your patient, you note that he has a clubbing of the fingers. You would suspect a history of:
A) hypoxemia.
B) neoplasm.
C) hypertension.
D) peripheral vascular disease.
Answer: A
Diff: 2 Page Ref: 19
Standard: Medicine (Respiratory)
Objective: 6, 7

72) A disorder of lung diffusion that results from increased fluid in the interstitial space is known as:
A) ARDS.
B) COPD.
C) AIDS.
D) PHTN.
Answer: A
Diff: 1 Page Ref: 26
Standard: Medicine (Respiratory)
Objective: 1, 7

73) The hallmark treatment of ARDS is to:
A) administer corticosteroids.
B) treat the underlying condition.
C) treat the increased fluid with diuretics.
D) perform renal dialysis to remove the fluid.
Answer: B
Diff: 1 Page Ref: 27
Standard: Medicine (Respiratory)
Objective: 8, 9

74) Which of the following is NOT a common obstructive lung disease encountered in the prehospital setting?

A) Asthma
B) CHF
C) Emphysema
D) Chronic bronchitis
Answer: B
Diff: 1 Page Ref: 27
Standard: Medicine (Respiratory)
Objective: 6

75) You respond to a patient with difficulty breathing. Upon assessment you notice that the patient is sitting in the tripod position, with marked JVD. The patient has clubbing in the fingers and new pitting edema. You should suspect:

A) CHF.
B) COPD.
C) cor pulmonale.
D) pulmonary neoplasm.
Answer: C
Diff: 3 Page Ref: 30
Standard: Medicine (Respiratory)
Objective: 1, 7

76) You are performing a physical exam on a patient with emphysema. You note that the patient has a pink hue to her skin. You should suspect:A) cor pulmonale.B) polycythemia.

B) polycytnemia.
C) methahemoglobinemia.
D) carboxyhemoglobinemia.
Answer: B
Diff: 2 Page Ref: 30-31
Standard: Medicine (Respiratory)
Objective: 6, 7

77) You are caring for a patient with chronic bronchitis. The patient has an SpO2 of 90%.
You should:
A) administer supplemental oxygen at high flow 15 lpm via NRB.
B) administer supplemental oxygen at high flow, via CPAP.
C) administer supplemental oxygen at low flow, via nasal cannula.
D) do nothing, as this is an expected reading.
Answer: C
Diff: 3 Page Ref: 32
Standard: Medicine (Respiratory)
Objective: 8

78) You are called to a patient with severe shortness of breath. Upon arrival, you find your patient in the tripod position, with pursed lips and audible wheezing. SpO₂ is at 89% and capnography shows a "shark fin" pattern with an ETCO₂ of 50. You should:

A) administer a beta agonist.
B) administer a beta antagonist.
C) administer an alpha antagonist.
D) administer an alpha agonist.
Answer: A
Diff: 3 Page Ref: 34
Standard: Medicine (Respiratory)
Objective: 7, 9

79) You are called to care for a patient with severe shortness of breath. The patient has an SpO2 of 88%, audible wheezing, and a capnography reading of 54 with a shark fin wave form. You are administering albuterol for the second time without relief. You suspect:
A) status epilepticus.
B) status asthmaticus.
C) anaphylaxis.
D) septic shock.
Answer: B
Diff: 3 Page Ref: 36
Standard: Medicine (Respiratory)
Objective: 8, 9

80) You arrive on the scene of a patient who complains of worsening shortness of breath for the past few days. The patient presents with an SpO₂ of 90%, ETCO₂ of 45, normal wave form, crackles, and a temperature of 101.5° F. You should suspect:

A) CHF.
B) COPD.
C) pneumonia.
D) ARDS.
Answer: C
Diff: 3 Page Ref: 37-38
Standard: Medicine (Respiratory)
Objective: 6, 9

81) You are called to the scene of a patient who has just attempted suicide by ingesting detergent. You notice that the patient is coughing and has a hoarse voice. You suspect:

A) tracheal rupture.
B) laryngeal edema.
C) subcutaneous emphysema.
D) nothing, this is a normal finding for this patient.
Answer: B
Diff: 3 Page Ref: 41
Standard: Medicine (Respiratory)
Objective: 8, 9

82) You arrive to find an unresponsive patient inside a running vehicle in his garage. Your destination should include a hospital with what capability?

A) Hyperbaric oxygen
B) Hypobaric oxygen
C) Neurosurgical capabilities
D) Any hospital
Answer: A
Diff: 2 Page Ref: 42-43
Standard: Medicine (Respiratory)
Objective: 8, 9