Comprehensive Respiratory and Burn Care Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. Which lab value is monitored for heparin therapy in pulmonary embolism treatment?

A. Prothrombin Time (PT)

B. INR

C. Platelet Count

D. Partial Thromboplastin Time (PTT)

2. Which modality provides noninvasive positive-pressure ventilation?

A. Endotracheal tube

B. Incentive spirometry

C. BiPAP (noninvasive positive pressure ventilation)

D. CPAP with nasal mask

3. After an electrical burn, which assessments should be monitored?

A. Blood pressure alone.

B. EKG, seizures, monitor kidneys, ARDS.

C. Visual acuity.

D. Liver function tests.

4. What action should be taken first for a patient with COPD experiencing increased shortness of breath?

A. Elevate HOB and administer oxygen

B. Administer diuretics

C. Obtain chest x-ray

D. Initiate mechanical ventilation

5. Which description matches a third-degree burn?

A. Painful with blisters.

B. Painless, charring, dry and leathery skin.

C. Red and warm with partial thickness.

D. Dry, but intact sensation.

6. Which combination of nutritional laboratory abnormalities is most commonly seen after a major burn?

A. High protein, high albumin

B. Normal protein and normal albumin

C. Elevated glucose only

D. Low protein, low albumin, and low sodium

7. Which description best matches a third-degree burn?

A. Painless, charred leathery skin.

B. Painful with swelling.

C. Painless, charring, dry and leathery skin.

D. Red, blistered skin.

8. What causes the high pressure alarm on a ventilator to activate?

A. Low oxygen levels due to device failure

B. The patient is coughing

C. Tubes clogged or patient biting tube; increase sedation and suction

D. Ventilator settings too high

9. What causes low pressure and high pressure alarms in mechanical ventilation?

A. Low pressure alarms indicate occlusion; High pressure alarms indicate patient coughing.

B. Low pressure alarms indicate leaks; High pressure alarms indicate biting the ET tube, secretions, obstruction, kink.

C. Low pressure alarms indicate battery failure

D. Low pressure alarms indicate power fluctuations

10. What should be the initial priorities in the management of any severe burn?

A. Antibiotics and wound debridement only.

B. Pain control and comfort measures only.

C. Airway and fluid resuscitation.

D. Nutritional support and infection control.

Answers

1. D
2. C
3. B
4. A
5. B
6. D
7. C
8. C
9. B
10. C

Explanations

1. Which lab value is monitored for heparin therapy in pulmonary embolism treatment?

A. Prothrombin Time (PT)

B. INR

C. Platelet Count

D. Partial Thromboplastin Time (PTT)

Monitoring unfractionated heparin therapy relies on the activated partial thromboplastin time because heparin slows the intrinsic and common coagulation pathways by enhancing antithrombin III. This prolongation of the aPTT reflects the level of anticoagulation, so clinicians adjust the heparin dose to keep the aPTT within a therapeutic range (often 1.5–2.5 times the control value, per the lab protocol). Prothrombin time and INR assess the extrinsic pathway and are used to monitor warfarin therapy, not heparin. Platelet count is watched to detect heparin-induced thrombocytopenia, not for dosing the drug. Thus, the lab value used to monitor heparin therapy is the activated partial thromboplastin time.

2. Which modality provides noninvasive positive-pressure ventilation?

A. Endotracheal tube

B. Incentive spirometry

C. BiPAP (noninvasive positive pressure ventilation)

D. CPAP with nasal mask

Noninvasive positive-pressure ventilation is about delivering pressurized air to support a patient's own breaths without an artificial airway. BiPAP does this by giving two pressure levels: a higher inspiratory pressure during inhalation and a lower expiratory pressure during exhalation. This setup actively augments ventilation, increases tidal volume, reduces the work of breathing, and improves CO_2 removal, all through a mask or similar interface without an endotracheal tube. An endotracheal tube is invasive, so it doesn't meet the noninvasive criterion. Incentive spirometry is a lung-expansion therapy, not a mode of positive-pressure ventilation. CPAP with a nasal mask provides continuous pressure to keep airways open and aid oxygenation, but it doesn't actively assist each breath like BiPAP does, which is why BiPAP is the modality that explicitly provides noninvasive positive-pressure ventilation.

3. After an electrical burn, which assessments should be monitored?

A. Blood pressure alone.

B. EKG, seizures, monitor kidneys, ARDS.

C. Visual acuity.

D. Liver function tests.

Electrical burns can affect several organ systems, not just the skin. The current can travel through the body and cause problems in the heart, brain, kidneys, and lungs. That's why the best monitoring plan includes an EKG to detect arrhythmias or conduction problems, observation for seizures or other CNS events, tracking kidney function and urine output because muscle injury from the burn can lead to rhabdomyolysis and kidney injury, and close watching of respiratory status to catch developing ARDS or other lung complications. Relying on blood pressure alone can miss rhythm disturbances or CNS injury, and visual acuity or liver function tests aren't the immediate, primary concerns in the acute following an electrical burn unless specific symptoms arise.

4. What action should be taken first for a patient with COPD experiencing increased shortness of breath?

A. Elevate HOB and administer oxygen

B. Administer diuretics

C. Obtain chest x-ray

D. Initiate mechanical ventilation

When a COPD patient has worsening shortness of breath, the priority is to stabilize breathing by improving oxygenation and easing chest wall mechanics. Elevating the head of the bed helps the diaphragm move more efficiently and reduces the effort required to breathe, which can lessen tachypnea and work of breathing. At the same time, providing supplemental oxygen treats low oxygen levels and helps relieve breathlessness, provided it is titrated to avoid over-oxygenation in CO2-retaining COPD patients. Use a moderate flow and monitor the patient with pulse oximetry, aiming for an SpO2 around 88–92% (adjusting to the individual patient's target as directed by protocols). After this stabilization, other steps may follow if needed: initiate bronchodilators and anti-inflammatory medications, consider noninvasive ventilation if there is hypercapnic respiratory failure despite optimized oxygen and bronchodilator therapy, and reserve diuretics for clear signs of fluid overload. Chest imaging and invasive ventilation are considered if the situation progresses orDiagnosed complications arise, but they should not take precedence over immediate oxygen therapy and proper positioning.

5. Which description matches a third-degree burn?

A. Painful with blisters.

B. Painless, charring, dry and leathery skin.

C. Red and warm with partial thickness.

D. Dry, but intact sensation.

This describes a third-degree burn, which is a full-thickness injury that destroys both the epidermis and dermis and may extend into deeper tissues. Because the nerve endings are damaged, the burned area often lacks pain. The skin tends to be dry and leathery, with a charred or eschar appearance, and it may look white, brown, or black. In contrast, less severe burns involve pain, moisture, and blistering due to preserved nerve endings. So the combination of painless sensation, dryness, leathery texture, and charring points to a full-thickness burn.

6. Which combination of nutritional laboratory abnormalities is most commonly seen after a major burn?

A. High protein, high albumin

B. Normal protein and normal albumin

C. Elevated glucose only

D. Low protein, low albumin, and low sodium

Major burn injuries trigger a strong stress response that drives rapid protein breakdown and loss from the wound and through capillary leak. This catabolic state lowers circulating proteins, so albumin decreases along with overall protein levels. At the same time, large volumes of IV fluids and ongoing losses from burned tissue lead to shifts in fluid and electrolytes, which commonly produce dilutional effects and sodium losses, resulting in low serum sodium in the acute phase. Put together, the typical nutritional laboratory picture after a major burn is low protein, low albumin, and low sodium. The other patterns don't fit this picture: protein and albumin wouldn't be high in such a catabolic state, and while glucose is often elevated due to stress, that alone doesn't capture the key protein and electrolyte disturbances.

7. Which description best matches a third-degree burn?

A. Painless, charred leathery skin.

B. Painful with swelling.

C. Painless, charring, dry and leathery skin.

D. Red, blistered skin.

The key idea here is how burn depth changes appearance and sensation. A third-degree burn goes through all layers of the skin, destroying both the epidermis and dermis (and often deeper tissues). Because the nerve endings are damaged, the burned area itself is typically painless. The skin that remains is dry and stiff, described as leathery, and may appear charred, white, brown, or black due to the dead tissue (eschar). This combination—no pain in the burned area, plus a dry, leathery, and often charred appearance—best matches the description of a full-thickness burn. The other descriptions fit shallower burns better: red, blistered skin points to superficial or deep partial-thickness burns, which are usually painful and moist due to intact nerve endings and fluid-filled blisters; a description of painless with swelling could occur in some deep burns but would not emphasize the dry, leathery, charred skin that characterizes full-thickness injury.

8. What causes the high pressure alarm on a ventilator to activate?

A. Low oxygen levels due to device failure

B. The patient is coughing

C. Tubes clogged or patient biting tube; increase sedation and suction

D. Ventilator settings too high

The high pressure alarm is triggered when the ventilator detects that peak airway pressure exceeds the set limit, which happens when there's more resistance to flow or the lungs are stiffer. The most common and immediate cause is an obstruction in the airway path, such as the endotracheal tube being blocked by secretions or the patient biting the tube. Both situations raise the resistance the ventilator must overcome to deliver a breath, pushing the pressure above the alarm threshold. Because obstruction is the core issue, the standard response is to clear the airway and calm the patient: suction to remove secretions and consider increasing sedation if the patient is actively biting or fighting the tube. Also check the circuit for kinks or condensation and verify the tube's position. Coughing can transiently raise pressure, and setting the ventilator too high can raise pressure as well, but those are less direct and less reliably addressed by immediate suctioning and sedation.

9. What causes low pressure and high pressure alarms in mechanical ventilation?

A. Low pressure alarms indicate occlusion; High pressure alarms indicate patient coughing.

B. Low pressure alarms indicate leaks; High pressure alarms indicate biting the ET tube, secretions, obstruction, kink.

C. Low pressure alarms indicate battery failure

D. Low pressure alarms indicate power fluctuations

When thinking about ventilator alarms, a low pressure alarm signals a loss of pressure in the breathing circuit, usually from a leak or disconnection. A high pressure alarm signals elevated airway pressure due to increased resistance or obstruction in the airway path or the tube itself. The best fit is that low pressure alarms indicate leaks in the system (such as a disconnected circuit or a cuff/leak around the endotracheal tube), while high pressure alarms indicate issues like biting the endotracheal tube, secretions causing obstruction, a kink in the tube, or other airway blockages. These scenarios directly connect a leak to low pressure and a blockage or resistance to high pressure. Why the other options don't fit as well: occlusion typically raises pressure, not lowers it, so it wouldn't explain a low pressure alarm. While coughing can raise airway pressure, it's not the most comprehensive or precise explanation for high pressure alarms, which also include biting, secretions, obstruction, and kink. Battery failure or power fluctuations relate to the ventilator's power supply rather than the pressure in the airway circuit.

10. What should be the initial priorities in the management of any severe burn?

A. Antibiotics and wound debridement only.

B. Pain control and comfort measures only.

C. Airway and fluid resuscitation.

D. Nutritional support and infection control.

Initial burn management focuses on life threats. In severe burns, airway can become compromised quickly due to facial burns, edema, or inhalation injury, so securing an airway and providing ventilatory support is essential early on. At the same time, massive fluid shifts from the injured tissues can cause rapid hypovolemia and shock, so starting fluid resuscitation promptly helps maintain perfusion to vital organs. Pain control and comfort are important, but they don't address these immediate life-threatening issues. Wound care, antibiotics, and infection control are critical parts of definitive management but follow stabilization of airway and circulation. Nutritional support supports recovery but is not the immediate priority before securing the airway and resuscitating fluids. So, the initial priorities are airway protection and fluid resuscitation.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://comprespiratoryandburncare.examzify.com

We wish you the very best on your exam journey. You've got this!