Fundamentals of Laparoscopic Surgery (FLS) Practice Exam (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. What is the typical warfarin discontinuation time before elective laparoscopy?

A. One day

B. Two days

C. Five days

D. Three days

2. Which CO2-related change tends to be greatest in the first 20 minutes of pneumoperitoneum?

A. Blood pH falls most after 2 hours

B. White blood cell count rises

C. Platelet count decreases

D. End tidal CO2 increases the most

3. In the context of energy use for hemostasis, bipolar energy is associated with which advantage?

A. Less lateral thermal spread

B. Increased energy requirement

C. Cannot be used in wet fields

D. Causes more collateral damage

4. Which scenario is a relative contraindication for emergency laparoscopy?

A. Hemodynamically unstable uncorrectable with resuscitation

B. No peritonitis

C. Young age

D. Massive bowel dilation

5. Which statement describes port placement for small bowel examination?

A. Ports all on the left side of the abdomen

B. Ports distributed on all quadrants

C. Ports on the right side

D. Midline port placement only

6. What technique is recommended to visualize the liver during laparoscopy?

- **A. Use angled scope; look for macronodularity associated with cirrhosis; ultrasound can be used**
- **B. Use straight scope only**
- **C. Visualize the liver by external palpation**
- **D. Use fluorescence imaging**

7. Veress needle insertion sites are commonly located at which locations?

- **A. Umbilicus and LUQ**
- **B. RUQ and LLQ**
- **C. Subxiphoid**
- **D. Inguinal region**

8. Bipolar hazards include improper functioning when metal is inside the jaws; which items exemplify this metal?

- **A. Clips or staples**
- **B. Sutures only**
- **C. Tissue**
- **D. Liquids**

9. Ultrasonic shears consist of which components?

- **A. A rotating blade and a cooling jacket**
- **B. A fixed blade and a suction port**
- **C. Consists of vibrating jaw or blade and a passive jaw**
- **D. A disposable clip applier**

10. To minimize tissue friction during an extracorporeal knot, which method is recommended?

- **A. Use manual tension with fingers**
- **B. Use a textured glove to grip**
- **C. Avoid contact with tissue**
- **D. Use the instrument as a fulcrum because of the 180-degree angle**

Answers

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

Explanations

1. What is the typical warfarin discontinuation time before elective laparoscopy?

A. One day

B. Two days

C. Five days

D. Three days

Stopping warfarin a few days before surgery aims to reduce bleeding risk while keeping the time off anticoagulation reasonable. Warfarin blocks vitamin K–dependent clotting factors and has a long half-life (roughly 36–42 hours), so its effect lingers after the pill is stopped. The INR typically falls toward normal within about three days for many patients, which lowers intraoperative bleeding risk enough for a minimally invasive procedure like laparoscopy without keeping the patient off protection for too long. Stopping earlier (more days) can unnecessarily raise thromboembolism risk, while stopping too late (one or two days) may leave the patient still highly anticoagulated during the operation. If there's high thrombotic risk, bridging with heparin and individual INR checks may be considered, but three days is the usual preoperative timeframe.

2. Which CO2-related change tends to be greatest in the first 20 minutes of pneumoperitoneum?

A. Blood pH falls most after 2 hours

B. White blood cell count rises

C. Platelet count decreases

D. End tidal CO2 increases the most

During pneumoperitoneum with CO2, the gas is absorbed across the peritoneal surfaces into the bloodstream. In the first 20 minutes, this rapid diffusion raises arterial CO2 levels, and the amount of CO2 being exhaled per breath (end-tidal CO2) increases accordingly. Capnography tracks this closely, so the end-tidal CO2 rises most early on. Other changes, like WBC or platelet shifts, are not immediate responses to CO2 insufflation, and a pH drop due to hypercapnia tends to develop later rather than right at the 20-minute mark. So the most pronounced early CO2-related change is the rise in end-tidal CO2.

3. In the context of energy use for hemostasis, bipolar energy is associated with which advantage?

A. Less lateral thermal spread

B. Increased energy requirement

C. Cannot be used in wet fields

D. Causes more collateral damage

Bipolar energy confines the current to the tissue between the two tips of the instrument, so heating is localized to a small area. This produces coagulation with much less spread of heat to surrounding tissue, reducing the risk of collateral injury to nearby structures. Because the energy path is short and self-contained, bipolar devices work well in tight spaces and even in wet fields. The other statements aren't true: you don't inherently need more energy with bipolar, and the device is not limited to dry fields; it also doesn't cause more collateral damage.

4. Which scenario is a relative contraindication for emergency laparoscopy?

A. Hemodynamically unstable uncorrectable with resuscitation

B. No peritonitis

C. Young age

D. Massive bowel dilation

Massive bowel dilation makes emergency laparoscopy less feasible because distended loops crowd the abdominal cavity, greatly reducing visualization and instrument access. This increases the risk of iatrogenic bowel injury during trocar placement and manipulation, and it also complicates creating and maintaining a safe pneumoperitoneum. The added intra-abdominal pressure can worsen ventilation and venous return, which is particularly problematic in a patient needing urgent care. For that reason, severe bowel distention is treated as a relative contraindication to proceed with laparoscopy in emergencies, with many clinicians favoring an open approach for rapid and safe management. The other scenarios described do not pose the same combination of visualization and access challenges.

5. Which statement describes port placement for small bowel examination?

A. Ports all on the left side of the abdomen

B. Ports distributed on all quadrants

C. Ports on the right side

D. Midline port placement only

Optimal exposure and instrument triangulation are essential when inspecting the small bowel with laparoscopy. Placing all ports on the left side creates a direct working corridor to the left abdomen, making it easier to bring small-bowel loops into view, sweep the entire length of the small intestine, and maneuver instruments without crowding or crossing from the right side. This setup also helps the assistant retracts the colon medially while the surgeon examines the loops from multiple angles, facilitating a systematic survey from proximal to distal segments. Using ports spread across all quadrants would disrupt this focused access and require awkward angulation; right-sided or midline-only placements limit exposure and reduce the ability to triangulate effectively for a thorough small-bowel examination.

6. What technique is recommended to visualize the liver during laparoscopy?

A. Use angled scope; look for macronodularity associated with cirrhosis; ultrasound can be used

B. Use straight scope only

C. Visualize the liver by external palpation

D. Use fluorescence imaging

Visualizing the liver during laparoscopy is best accomplished with fluorescence imaging, specifically using near-infrared indocyanine green. After injection, the dye circulates and is excreted into bile, so the laparoscopic camera with NIR capability highlights perfused liver tissue and biliary structures in real time. This provides enhanced contrast of vessels, liver parenchyma, and ducts, helping to delineate segments, assess perfusion before dissection, and identify critical structures that might be hidden. Other methods like adjusting scope angle or external palpation don't give the same immediate, surface-focused visualization, though ultrasound can help with deeper structures. Fluorescence imaging offers the most direct, real-time visualization for safe liver work during laparoscopy.

7. Veress needle insertion sites are commonly located at which locations?

A. Umbilicus and LUQ

B. RUQ and LLQ

C. Subxiphoid

D. Inguinal region

Veress needle entry aims to create pneumoperitoneum from a safe, reliable point that minimizes risk to intra-abdominal organs. The most common site is the umbilicus because it sits in a relatively avascular area with minimal underlying structures and provides straightforward access to the peritoneal cavity. A well-recognized alternative is a left upper quadrant entry at Palmer's point, used when the umbilical route is contraindicated (for example, prior abdominal surgery, obesity, or suspected liver enlargement) to avoid the liver and other intra-abdominal organs. The RUQ and LLQ, subxiphoid area, and inguinal region are not standard Veress needle sites because they carry higher risk of injury to organs or are not reliable for accessing the peritoneal cavity.

8. Bipolar hazards include improper functioning when metal is inside the jaws; which items exemplify this metal?

A. Clips or staples

B. Sutures only

C. Tissue

D. Liquids

Bipolar energy relies on a clean current path between the jaws through tissue. When a metal object is trapped inside the jaws, it becomes part of that current path and can alter impedance, causing unintended heating, arcing, or malfunction of the device. Metallic clips or staples are examples of such metal items and can heat up or disrupt energy delivery, increasing the risk of tissue injury or equipment failure. Sutures, tissue, and liquids are not metal and do not create the same risk to the current path in the jaws.

9. Ultrasonic shears consist of which components?

A. A rotating blade and a cooling jacket

B. A fixed blade and a suction port

C. Consists of vibrating jaw or blade and a passive jaw

D. A disposable clip applier

Ultrasonic shears work by using high-frequency mechanical vibration delivered to an actively moving blade that cuts and coagulates tissue, while tissue is held and manipulated by a passive, non-moving jaw. The handpiece contains a transducer that converts electrical energy into rapid blade vibration; the passive jaw keeps tissue stable as the vibrating blade shears it. This two-jaw setup—one vibrating, one passive—enables effective dissection and coagulation without relying on rotation, suction, or clip-applier functions.

10. To minimize tissue friction during an extracorporeal knot, which method is recommended?

A. Use manual tension with fingers

B. Use a textured glove to grip

C. Avoid contact with tissue

D. Use the instrument as a fulcrum because of the 180-degree angle

Minimizing tissue friction comes from redirecting the force so the suture doesn't drag directly across tissue. Using the instrument as a fulcrum to create a 180-degree change in direction allows the knot to be cinched by the suture sliding around the instrument rather than abrading tissue. This setup reduces shear on the tissue and smooths the tightening motion, helping protect tissue during extracorporeal knot tying. Other methods don't change the path of the suture in the same way, so they don't offer the same reduction in friction: pulling with fingers tends to drag tissue, gripping with a textured glove doesn't address the suture-tissue contact path, and avoiding tissue contact isn't practical for tying the knot.

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://laparoscopicsurgeryfls.examzify.com

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