CBIC Certified in Infection Control (CIC) 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. In DMAIC, what does the M step involve?

A. Define customers, project boundaries, and processes

B. Measure performance

C. Analyze data to identify causes of variation, gaps in performance, and prioritize actions

D. Control the process

2. Which statement characterizes an interval scale of measurement?

A. Natural zero point

B. Qualitative categories

C. Order only

D. Numerical distances between intervals

3. On a control chart, what does the central line represent?

A. The latest data point

B. The upper control limit

C. The lower control limit

D. The average of the data points

4. What does SIR stand for in infection control surveillance?

A. Standard Infection Rate

B. Standardization of Infection Rate

C. Standardized Infection Ratio

D. Surveillance of Infection Rates

5. Which option best describes a sex as data scale?

A. Ordinal Scale

B. Interval Scale

C. Ratio Scale

D. Nominal Scale

6. High-level disinfection is required for which type of items?

A. Non-critical items

B. Heat-sensitive semi-critical items

C. Critical items

D. All items including those entering sterile body spaces

7. If HBsAg is positive and HBsAb negative, what does that suggest?

A. Immunity after vaccination

B. Infectious hepatitis B infection

C. Immunity from natural infection

D. Recovery only

8. Proportion of spinal cord injury patients who develop decubitus ulcers is approximately?

A. 1/5

B. 1/3

C. 1/2

D. 2/3

9. Which of the following is NOT typically part of the diagnostic workup for chronic hepatitis?

A. Serologic markers

B. Elevated liver enzymes

C. Liver biopsy

D. Urinalysis

10. Serology for chronic active state of HepB

A. -HbsAB

B. +HbsAG +HbcAB

C. +HbsAB

D. +HBeAG

Answers

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

Explanations

1. In DMAIC, what does the M step involve?

A. Define customers, project boundaries, and processes

B. Measure performance

C. Analyze data to identify causes of variation, gaps in performance, and prioritize actions

D. Control the process

Measuring the current process performance and establishing a reliable baseline is the focus of this step. It involves selecting the right metrics that reflect what matters to customers, creating a data collection plan, and gathering data about how the process actually behaves. A crucial part is confirming the measurement system itself is trustworthy—checking the data collection method for accuracy and consistency (for example, evaluating measurement reproducibility and repeatability). With high-quality data, you quantify how the process performs now, understand the level of variation, and set a credible baseline for comparison in the Analyze step and for tracking improvements later. This distinguishes it from the Define step (which sets scope and CTQs), the Analyze step (which digs into causes of variation), and the Control step (which sustains gains).

2. Which statement characterizes an interval scale of measurement?

A. Natural zero point

B. Qualitative categories

C. Order only

D. Numerical distances between intervals

Interval scales feature equal intervals between adjacent values, which means you can meaningfully measure the difference between any two points on the scale. This allows numerical distances or differences to be interpreted consistently across the range. However, unlike a ratio scale, there isn't a true zero that indicates the absence of the quantity; zero on an interval scale is arbitrary. That combination—consistent, equal steps that permit subtraction—defines interval data. This differs from a natural zero point (which would indicate a true zero and aligns with a ratio scale), from qualitative categories (nominal data), and from order-only information (ordinal data).

3. On a control chart, what does the central line represent?

A. The latest data point

B. The upper control limit

C. The lower control limit

D. The average of the data points

The central line on a control chart represents the long-term average value of the process—the mean around which the data vary. In charts that plot subgroup means, this line is the grand mean of those subgroups and serves as the baseline for monitoring stability. It is not the most recent data point, nor are the limits the center; the upper and lower control limits define the expected range of variation around this central mean. Most data points should stay near that line within the limits, and patterns or persistent shifts away from it can indicate a potential special cause that warrants investigation. Depending on the chart, the central line may also align with a target value, but its role is to provide the baseline mean for assessing process performance.

4. What does SIR stand for in infection control surveillance?

A. Standard Infection Rate

B. Standardization of Infection Rate

C. Standardized Infection Ratio

D. Surveillance of Infection Rates

Standardized Infection Ratio is the measure used to compare the number of infections observed in a facility to the number predicted by a risk-adjusted model. In infection control surveillance, facilities track infections (like CLABSI, CAUTI, or SSI) and compare them to national baseline data after accounting for patient and unit risk factors. The ratio is calculated as Observed infections divided by Predicted infections. An SIR of 1.0 means infections are as expected; greater than 1.0 means more infections than predicted; less than 1.0 means fewer. This standardization enables fair comparisons across hospitals with different patient populations and case mix. The other phrases do not reflect this risk-adjusted ratio used in surveillance.

5. Which option best describes a sex as data scale?

A. Ordinal Scale

B. Interval Scale

C. Ratio Scale

D. Nominal Scale

Sex is best described as a nominal data scale because it uses category labels that do not convey order or magnitude. Labeling someone as male, female, or another category groups individuals without implying that one category is higher, lower, or quantitatively different from another. This means you can count and report frequencies or use mode, and you'd typically analyze such data with methods like chi-square tests. In contrast, ordinal scales would require a meaningful order (for example, small, medium, large), interval scales would require equal intervals between values and no true zero, and ratio scales would require a true zero and meaningful ratios (like height or duration). Since sex lacks inherent ranking and a numeric distance between categories, it fits the nominal scale.

6. High-level disinfection is required for which type of items?

A. Non-critical items

B. Heat-sensitive semi-critical items

C. Critical items

D. All items including those entering sterile body spaces

High-level disinfection is used for heat-sensitive semi-critical items that contact mucous membranes or non-intact skin. These items can't be sterilized by heat without damage, so HLD provides the level of microbial kill necessary to make them safe for patient contact. Non-critical items, which touch only intact skin, require cleaning and low-level disinfection. Critical items, which enter sterile body spaces, require sterilization. Therefore, the correct category is heat-sensitive semi-critical items.

7. If HBsAg is positive and HBsAb negative, what does that suggest?

A. Immunity after vaccination

B. Infectious hepatitis B infection

C. Immunity from natural infection

D. Recovery only

The key idea is what the serology tells you about current infection and immunity. HBsAg is the surface antigen of hepatitis B; its presence in the blood means the person has an active HBV infection and can be infectious. HBsAb (the antibody to the surface antigen) indicates immunity—either from vaccination or from recovery after past infection. If HBsAb is negative, there is no protective immunity. So having HBsAg positive and HBsAb negative points to an active hepatitis B infection with infectivity and no immunity. Depending on how long the antigen has been present, this could be an acute infection or chronic infection; additional tests (like IgM anti-HBc for acute infection) help distinguish, but the core interpretation is active infection with contagious potential and no immunity.

8. Proportion of spinal cord injury patients who develop decubitus ulcers is approximately?

A. 1/5

B. 1/3

C. 1/2

D. 2/3

The main idea is how common pressure ulcers are in people with spinal cord injury. In this population, limited mobility and loss of protective sensation mean prolonged pressure over bony areas can lead to tissue damage, and other factors such as moisture, incontinence, poor nutrition, and impaired perfusion further raise the risk. About one third of spinal cord injury patients develop decubitus ulcers at some point. This estimate captures the typical prevalence seen in many care settings and highlights why prevention is crucial: regular repositioning, pressure-relieving surfaces, careful skin inspection, moisture management, and nutritional optimization are essential to reduce the risk and catch early signs before ulcers worsen. Other proportions would overstate or understate the commonality in most SCI care populations. For example, a much smaller figure would imply ulcers are rare, while a figure around half or more would suggest ulcers are nearly universal, which is not the usual observation in standard clinical practice.

9. Which of the following is NOT typically part of the diagnostic workup for chronic hepatitis?

A. Serologic markers

B. Elevated liver enzymes

C. Liver biopsy

D. Urinalysis

Diagnosing chronic hepatitis centers on information about the liver itself, including what caused the disease and how much inflammation and fibrosis are present. Serologic markers are used to identify the underlying etiology, such as viral hepatitis panels or autoimmune and metabolic tests. Elevated liver enzymes, particularly ALT and AST, reflect hepatocellular injury and help gauge disease activity. A liver biopsy provides histology to assess inflammation and the stage of fibrosis, guiding prognosis and management when noninvasive tests aren't enough. Urinalysis does not directly inform the cause or extent of chronic hepatitis and isn't part of the standard diagnostic workup, though it may be used for other unrelated health assessments.

10. Serology for chronic active state of HepB

A. -HbsAB

B. +HbsAG +HbcAB

C. +HbsAB

D. +HBeAG

Chronic hepatitis B is defined by the persistence of the surface antigen (HBsAg) for more than 6 months. When an infection becomes chronic, you typically see HBsAg present along with antibodies to the core (HBcAb), indicating a long-standing exposure to the virus. The combination of HBsAg positive and anti-HBc positive most clearly signals chronic active HBV infection because it shows ongoing infection (HBsAg) with evidence of prior or continuing immune response to the core antigen (anti-HBc). Having anti-HBs would indicate immunity—either from vaccination or recovery—and does not reflect an active chronic infection. HBeAg signals viral replication and infectivity but can be present in both acute and chronic phases and does not on its own define a chronic active state.

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://cbiccic.examzify.com

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