Dosage Calculation RN Fundamentals Assessment 3.0 Practice Test (Sample)

Study Guide

BY EXAMZIFY

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

SAMPLE

1. If a patient requires 20 mL of codeine oral solution, how many teaspoons should be administered?

   A. 2 tsp

   B. 3 tsp

   C. 4 tsp

   D. 5 tsp

2. If a nurse received a verbal order for 300 mL of IV fluids to run over 6 hours, what is the hourly rate?

   A. 25 mL/hour

   B. 50 mL/hour

   C. 75 mL/hour

   D. 100 mL/hour

3. Convert 400 mcg to mg.

   A. 0.2 mg

   B. 0.4 mg

   C. 0.6 mg

   D. 0.8 mg

4. How would you express 0.025 in percentage form?

   A. 0.25%

   B. 2.5%

   C. 25%

   D. 0.025%

5. A liquid medication is prescribed at 5 mL. If the medicine comes in a measuring spoon that holds 15 mL, how much of the spoon should the patient take?

   A. 1/3 of a spoon

   B. 1/2 of a spoon

   C. 2/3 of a spoon

   D. 1 full spoon

6. **What is the total daily dose if a medication is prescribed as 150 mg twice a day?**

    A. 150 mg

    B. 300 mg

    C. 450 mg

    D. 600 mg

7. **A patient is to receive 1,000 mL of sodium chloride over 10 hours. What rate should the nurse set for the IV pump?**

    A. 50 mL/hr

    B. 75 mL/hr

    C. 100 mL/hr

    D. 150 mL/hr

8. **How many inches are there in 1 foot?**

    A. 10 inches

    B. 12 inches

    C. 14 inches

    D. 16 inches

9. **If a solution is labeled as 10%, what does this mean in terms of grams per 100 mL?**

    A. 5 grams per 100 mL

    B. 10 grams per 100 mL

    C. 15 grams per 100 mL

    D. 20 grams per 100 mL

10. **If a patient is to receive 400 mcg of a medication and it is supplied in 200 mcg tablets, how many tablets are needed?**

    A. 1 tablet

    B. 2 tablets

    C. 3 tablets

    D. 4 tablets

Answers

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

Explanations

1. If a patient requires 20 mL of codeine oral solution, how many teaspoons should be administered?

A. 2 tsp

B. 3 tsp

C. 4 tsp

D. 5 tsp

To determine the correct number of teaspoons for 20 mL of codeine oral solution, it's important to know the conversion between milliliters and teaspoons. 1 teaspoon is equivalent to approximately 5 milliliters. To convert milliliters to teaspoons, you divide the number of milliliters by the number of milliliters in one teaspoon. So, for 20 mL: - You take 20 mL and divide it by 5 mL/tsp, which equals 4 teaspoons. This calculation aligns with the requirement for the patient and confirms that 20 mL corresponds to 4 teaspoons. Therefore, administering 4 teaspoons is accurate and supports proper dosing of the medication.

2. If a nurse received a verbal order for 300 mL of IV fluids to run over 6 hours, what is the hourly rate?

A. 25 mL/hour

B. 50 mL/hour

C. 75 mL/hour

D. 100 mL/hour

To determine the hourly rate for administering 300 mL of IV fluids over 6 hours, you would divide the total volume of fluid by the total time in hours. Calculating this, you would take 300 mL and divide it by 6 hours, which results in: 300 mL ÷ 6 hours = 50 mL/hour. This calculation confirms that the correct hourly rate is 50 mL/hour. Understanding this calculation is crucial for nurses as it ensures the correct dosage is administered over the designated time, promoting patient safety and effective treatment outcomes. The other options may suggest rates that would either under-deliver or over-deliver the fluids, potentially leading to inadequate treatment or fluid overload for the patient, hence why they are not the right choice.

3. Convert 400 mcg to mg.

A. 0.2 mg

B. 0.4 mg

C. 0.6 mg

D. 0.8 mg

To convert micrograms (mcg) to milligrams (mg), it is essential to know the relationship between the two units. Specifically, 1 milligram is equivalent to 1000 micrograms. Therefore, to convert from micrograms to milligrams, you can use the following formula: $$ \text{mg} = \frac{\text{mcg}}{1000} $$ Using this formula for the provided value: $$ \text{mg} = \frac{400 \, \text{mcg}}{1000} = 0.4 \, \text{mg} $$ This calculation shows that 400 micrograms is equal to 0.4 milligrams, which directly corresponds to the correct answer. Understanding this conversion is helpful not only for this particular question but also in practical nursing situations where precise medication dosing is critical.

4. How would you express 0.025 in percentage form?

A. 0.25%

B. 2.5%

C. 25%

D. 0.025%

To express 0.025 in percentage form, you need to convert the decimal to a percentage by multiplying it by 100. This is a standard method for converting any decimal to a percentage. When you multiply 0.025 by 100, you shift the decimal point two places to the right, which results in 2.5. Therefore, 0.025 expressed as a percentage is 2.5%. This conversion is important in various calculations, particularly in medical dosing, where understanding and conveying information in a clear format is crucial for patient safety and accurate medication administration.

5. A liquid medication is prescribed at 5 mL. If the medicine comes in a measuring spoon that holds 15 mL, how much of the spoon should the patient take?

A. 1/3 of a spoon

B. 1/2 of a spoon

C. 2/3 of a spoon

D. 1 full spoon

To determine how much of the 15 mL measuring spoon should be filled to equal the prescribed 5 mL dose, you can use a simple fraction calculation. Since the measuring spoon holds 15 mL, you want to figure out what fraction of that spoon corresponds to the 5 mL dosage. By dividing the prescribed dose (5 mL) by the total capacity of the spoon (15 mL), you can calculate the fraction: 5 mL ÷ 15 mL = 1/3 This means that taking 1/3 of the spoon will provide the exact 5 mL dose that has been prescribed. Therefore, the correct option accurately describes the amount of the spoon that should be used to achieve the correct dosage. Understanding this principle is important in medication administration to ensure patients receive the correct amounts of their prescriptions, preventing underdosing or overdosing.

6. What is the total daily dose if a medication is prescribed as 150 mg twice a day?

A. 150 mg

B. 300 mg

C. 450 mg

D. 600 mg

To determine the total daily dose of a medication prescribed as 150 mg twice a day, you need to perform a simple multiplication calculation. The prescription indicates that the patient is to take 150 mg two times within a 24-hour period. Calculating this involves multiplying the single dose (150 mg) by the number of times it is administered each day (2). So, the calculation is: 150 mg x 2 = 300 mg. Thus, the total daily dose is 300 mg. This total reflects the cumulative amount of the medication the patient will receive over the course of a day, ensuring that they receive the intended therapeutic effect within safe limits.

7. A patient is to receive 1,000 mL of sodium chloride over 10 hours. What rate should the nurse set for the IV pump?

A. 50 mL/hr

B. 75 mL/hr

C. 100 mL/hr

D. 150 mL/hr

To determine the infusion rate for administering 1,000 mL of sodium chloride over 10 hours, the calculation involves dividing the total volume of fluid by the total time in hours.   Start by converting the total volume of 1,000 mL to hours: since the solution is to be administered over 10 hours, the calculation is straightforward.   1. Calculate the infusion rate: $\[\text{Infusion rate} = \frac{\text{Total volume}}{\text{Total time}} = \frac{1000 \text{ mL}}{10 \text{ hours}} = 100 \text{ mL/hr} \]$ Setting the IV pump to 100 mL/hr ensures that the entire 1,000 mL will be infused correctly within the designated period. This rate allows for a steady flow, ensuring the patient receives the necessary volume without being too fast or too slow, which could lead to complications such as fluid overload or ineffective treatment.

8. How many inches are there in 1 foot?

A. 10 inches

B. 12 inches

C. 14 inches

D. 16 inches

One foot is defined as being exactly 12 inches long. This measurement is part of the Imperial system of units commonly used in the United States and some other countries. The foot is subdivided into inches, with 12 being the standard number of inches that make up one foot. This is a foundational measurement in various applications such as construction, tailoring, and even in everyday contexts like measuring height. Understanding this conversion is essential for accurate calculations in any scenario that involves length measurement in feet and inches.

9. If a solution is labeled as 10%, what does this mean in terms of grams per 100 mL?

A. 5 grams per 100 mL

B. 10 grams per 100 mL

C. 15 grams per 100 mL

D. 20 grams per 100 mL

When a solution is labeled as 10%, it indicates that there are 10 grams of solute in every 100 mL of solution. The percentage concentration is defined as the mass of the solute divided by the total volume of the solution, multiplied by 100. Thus, a 10% solution means that there is a direct relationship of 10 grams of the solute present per 100 mL of the solution. This is a straightforward calculation of using percentage to indicate concentration, which is commonly used in pharmacology and nursing for understanding dosages and medication preparation.

10. If a patient is to receive 400 mcg of a medication and it is supplied in 200 mcg tablets, how many tablets are needed?

A. 1 tablet

B. 2 tablets

C. 3 tablets

D. 4 tablets

To determine the number of tablets needed for the patient to receive the prescribed dose of 400 mcg, we first assess how much medication is contained in each tablet. With the medication supplied in 200 mcg tablets, we can calculate the total number of tablets required by dividing the total required dose (400 mcg) by the amount per tablet (200 mcg).   Calculating this gives us: 400 mcg (total dose) ÷ 200 mcg (per tablet) = 2 tablets. This shows that the patient would need 2 tablets to reach the required dosage of 400 mcg. This reasoning ensures that the patient receives the exact amount of medication needed for effective treatment without exceeding or falling short of the intended dose.

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://dosagecalcrnfundassmt3.examzify.com

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