OFFICER APTITUDE RATING (OAR) PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://oar.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 15

SAMPLE

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. **At what altitude are cirrocumulus clouds typically found?**

   A. Below 6,000 feet

   B. 6,000 to 20,000 feet

   C. Above 18,000 feet

   D. From near the ground to above 50,000 feet

2. **If a right triangle has one angle measuring 30 degrees, what is the measure of the other non-right angle?**

   A. 30 degrees

   B. 45 degrees

   C. 60 degrees

   D. 90 degrees

3. **A tank with a volume of 500 gallons can be filled by one pipe in 25 minutes and drained by another pipe in 50 minutes. How long will it take to fill the tank if both pipes are open?**

   A. 50 minutes

   B. 52 minutes

   C. 55 minutes

   D. 56 minutes

4. **If a purchaser paid $17.16 after a 4% price increase, what was the price before the increase?**

   A. $16.50

   B. $16.47

   C. $16.00

   D. $17.00

5. **In fluid mechanics, what principle explains the increase in pressure with depth?**

   A. Archimedes' principle

   B. Pascal's law

   C. Bernoulli's principle

   D. Hydrostatic pressure principle

SAMPLE

6. Which of the following describes how to convert a decimal to a fraction?

A. Multiply by ten

B. Identify the place value and express accordingly

C. Add the whole number

D. Subtract the whole number

7. What is a micrometer mainly used for?

A. Measuring large distances

B. Calculating electric resistance

C. Precise measurements of small dimensions

D. Determining temperatures

8. How do you find the square root of a non-perfect square like 28?

A. Estimate between the nearest whole numbers

B. Use a calculator for exact value

C. Round it to the nearest integer

D. Subtract 1 from the perfect square root

9. If it takes 15 minutes to fill a tank and 30 minutes to empty it, what is the effective fill rate with both pipes open?

A. 10 gallons per minute

B. 15 gallons per minute

C. 20 gallons per minute

D. 30 gallons per minute

10. What is the primary unit of measure for electric charge?

A. Coulomb

B. Volt

C. Watt

D. Ampere

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. At what altitude are cirrocumulus clouds typically found?

A. Below 6,000 feet

B. 6,000 to 20,000 feet

C. Above 18,000 feet

D. From near the ground to above 50,000 feet

Cirrocumulus clouds are typically found at high altitudes, generally within the range of 18,000 feet to 40,000 feet above mean sea level. These clouds are part of the cirrus cloud family and are characterized by their thin, wispy appearance, often resembling small, white patchy layers. Their high altitude is due to the fact that they form in the upper troposphere, where temperatures are low enough to allow the formation of ice crystals, which make up these clouds. The other altitude ranges mentioned, such as below 6,000 feet and between 6,000 to 20,000 feet, pertain to different types of clouds. For instance, cumulus and stratus clouds typically form at lower elevations. When considering clouds that develop above 18,000 feet, it is important to distinguish between different cloud types; cirrocumulus specifically indicates a formation above this altitude. Thus, recognizing cirrocumulus clouds as high-altitude formations helps solidify their classification and accurately places them in the context of cloud types and their typical altitudes.

2. If a right triangle has one angle measuring 30 degrees, what is the measure of the other non-right angle?

A. 30 degrees

B. 45 degrees

C. 60 degrees

D. 90 degrees

In a right triangle, the sum of the angles always equals 180 degrees. Given that one angle is a right angle, measuring 90 degrees, and another angle measures 30 degrees, we can find the measure of the third angle by using the formula for the sum of angles in a triangle. Start with the total, 180 degrees, and subtract the measures of the known angles: 180 degrees - 90 degrees (right angle) - 30 degrees (one of the angles) = 60 degrees. This calculation shows that the remaining angle must measure 60 degrees. Therefore, in a right triangle where one angle is 30 degrees, the other non-right angle must indeed be 60 degrees. This is consistent with the properties of right triangles and the specific relationship between angles in a triangle, particularly the special characteristics of 30-60-90 triangles, where the angles are always in the ratio of 1:2:√3 in terms of their corresponding side lengths.

SAMPLE

3. A tank with a volume of 500 gallons can be filled by one pipe in 25 minutes and drained by another pipe in 50 minutes. How long will it take to fill the tank if both pipes are open?

A. 50 minutes

B. 52 minutes

C. 55 minutes

D. 56 minutes

To determine how long it will take to fill the tank when both pipes are open, we should first ascertain the filling and draining rates of the respective pipes. The filling pipe can fill the tank in 25 minutes. This means it can fill 1/25 of the tank's volume per minute. Conversely, the draining pipe empties the tank in 50 minutes, equating to a rate of 1/50 of the tank's volume per minute. When both pipes are open simultaneously, the net rate of filling the tank is derived by subtracting the draining rate from the filling rate. Hence, we have: Filling rate: 1/25 tanks per minute Draining rate: 1/50 tanks per minute To combine these rates effectively, we find a common denominator. For 25 and 50, the lowest common multiple is 50: - The filling rate becomes 2/50 tanks per minute (since 1/25 = 2/50). - The draining rate remains 1/50 tanks per minute. Now, we can subtract the draining rate from the filling rate: Net Rate = (2/50) - (1/50) = 1/50 tanks per minute. Therefore,

4. If a purchaser paid $17.16 after a 4% price increase, what was the price before the increase?

A. $16.50

B. $16.47

C. $16.00

D. $17.00

To find the price before the 4% increase, you can set up the equation based on the information given. If the original price is represented as P, then after a 4% increase, the new price can be expressed as $P + 0.04P = 1.04P$. Given that the price after the increase was $17.16, you can express this relationship as: $$1.04P = 17.16$$ To find the original price P, you would divide $17.16 by 1.04: $$P = \frac{17.16}{1.04}$$ Now calculating this gives: $$P = 16.50$$ This indicates that prior to the price increase, the item cost $16.50. However, the answer provided as "B" indicates a price of $16.47, which doesn't match the calculation. Thus, the accurate approach confirms that the original price before the increase should indeed be $16.50 based on the calculations, and the process demonstrates how to arrive at the original price from a known increased value.

SAMPLE

5. In fluid mechanics, what principle explains the increase in pressure with depth?

A. Archimedes' principle

B. Pascal's law

C. Bernoulli's principle

D. Hydrostatic pressure principle

The principle that explains the increase in pressure with depth in a fluid is the Hydrostatic Pressure Principle. This principle states that the pressure exerted by a fluid in a state of rest increases with depth due to the weight of the fluid above it. The deeper you go into the fluid, the greater the weight of the liquid column above that point, which leads to an increase in pressure. The Hydrostatic Pressure Principle can be mathematically represented by the equation \(P = \rho g h \), where \(P \) is the pressure, \(\rho \) is the density of the fluid, \(g \) is the acceleration due to gravity, and \(h \) is the depth. As depth increases, the pressure rises proportionally, which is a key concept in fluid mechanics and is fundamental in various applications, such as calculating the pressure at different depths in seas and large bodies of water. In contrast to this principle, Archimedes' principle deals with buoyancy and the upward force experienced by an object submerged in a fluid. Pascal's law describes how pressure is transmitted equally in all directions throughout an incompressible fluid. Bernoulli's principle relates to the conservation of energy in flowing fluids, indicating that an increase in the speed

6. Which of the following describes how to convert a decimal to a fraction?

A. Multiply by ten

B. Identify the place value and express accordingly

C. Add the whole number

D. Subtract the whole number

To convert a decimal to a fraction, identifying the place value and expressing it accordingly is the correct approach. When you have a decimal, the placement of the digits informs you about their respective value. For instance, in the decimal 0.75, the '7' is in the tenths place and the '5' is in the hundredths place. Thus, this decimal can be expressed as 75/100. You can then simplify this fraction by dividing both the numerator and the denominator by their greatest common divisor, leading to 3/4. This understanding of place values is essential for accurately representing decimals as fractions without losing precision. Simply multiplying by ten or manipulating the whole number doesn't provide a complete or accurate method for conversion. Knowing how to identify place values ensures that the fraction is correctly formulated and reflects the decimal's true value.

7. What is a micrometer mainly used for?

A. Measuring large distances

B. Calculating electric resistance

C. Precise measurements of small dimensions

D. Determining temperatures

A micrometer is primarily utilized for the precise measurement of small dimensions, such as the thickness of a sheet of paper or the diameter of small objects like wires and bolts. This tool is essential in fields where high accuracy is crucial, such as engineering, manufacturing, and machining. The design of a micrometer includes a calibrated screw that allows for minute adjustments, enabling it to measure with great precision down to thousandths of an inch (or hundredths of a millimeter). In contrast, other options do not align with the primary function of a micrometer. Measuring large distances is typically done with instruments like tape measures or surveying equipment. Calculating electric resistance would involve devices like ohmmeters or multimeters, and determining temperatures relies on thermometers. Therefore, the correct option highlights the specialized use of a micrometer in achieving precise measurements of very small dimensions.

EXAMPLE

8. How do you find the square root of a non-perfect square like 28?

A. Estimate between the nearest whole numbers

B. Use a calculator for exact value

C. Round it to the nearest integer

D. Subtract 1 from the perfect square root

Finding the square root of a non-perfect square involves estimating between the nearest whole numbers that, when squared, are closest to the given number. For the number 28, you can identify that 5 squared (25) is less than 28, and 6 squared (36) is more than 28. Therefore, the square root of 28 lies between 5 and 6. This method of estimation allows you to quickly narrow down the potential value and get a rough idea of where the square root lies. By working with whole numbers and their squares, you can visualize the range in which the actual square root falls, making it a practical approach for manual calculations or when a calculator is not available. Utilizing a calculator for exact value provides precision but does not engage with understanding the numerical relationship through estimation. Rounding the number to the nearest integer or subtracting from a perfect square root may lead to inaccuracies or misrepresentation of the actual square root value. Therefore, estimating is the most straightforward and effective method for finding a square root in this case.

9. If it takes 15 minutes to fill a tank and 30 minutes to empty it, what is the effective fill rate with both pipes open?

A. 10 gallons per minute

B. 15 gallons per minute

C. 20 gallons per minute

D. 30 gallons per minute

To determine the effective fill rate with both the filling and emptying pipes open, first, it's important to assess the rates at which each pipe operates. When filling the tank, the fill pipe takes 15 minutes to fill it completely. This means that the fill rate is equal to 1 tank per 15 minutes, or 4 tanks per hour, translating into an effective rate in gallons per minute if the tank's total capacity is known. Conversely, the emptying pipe takes 30 minutes to drain the tank. Thus, its emptying rate is 1 tank per 30 minutes, or 2 tanks per hour. This reflects a draining rate of 2 tanks for every 60 minutes. To find the effective rate when both pipes are running simultaneously, we take the fill rate and subtract the emptying rate. In terms of tank capacity: - The fill pipe fills up at a rate of 4 tanks per hour. - The empty pipe drains at a rate of 2 tanks per hour. When these rates are combined, you calculate the net rate: Effective fill rate = Fill rate - Empty rate = 4 tanks/hour - 2 tanks/hour = 2 tanks/hour. Now, converting this to a per minute basis

10. What is the primary unit of measure for electric charge?

A. Coulomb

B. Volt

C. Watt

D. Ampere

The primary unit of measure for electric charge is the coulomb. The coulomb quantifies the amount of electrical charge carried by a current of one ampere flowing for one second. It is a fundamental unit in the International System of Units (SI) and is crucial for understanding electric phenomena. In contrast, a volt is the unit of electric potential, which measures the potential energy per unit charge, while a watt measures power, representing the rate of energy transfer. The ampere, on the other hand, is the unit of electric current, referring to the flow of electric charge. These other units relate to electricity but do not specifically measure the charge itself, making the coulomb the correct answer for this question.

SAMPLE

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://oar.examzify.com

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

SAMPLE