

GEORGIA CATEGORY 41 PEST CONTROL – MOSQUITO SURVEILLANCE PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://gacat41pestcontrol.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.

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. What are mosquito larvae commonly referred to as?**
 - A. Wigglers
 - B. Maggots
 - C. Nymphs
 - D. Pupae
- 2. Which two species have a flight variant less than 10-20 miles?**
 - A. Aedes vexans and Ochlerotatus
 - B. Aedes aegypti and Aedes albopictus
 - C. Anopheles gambiae and Culex quinquefasciatus
 - D. Aedes aegypti and Anopheles gambiae
- 3. What is the lifecycle of a mosquito in the correct order?**
 - A. Egg - Larva - Pupa - Adult
 - B. Egg - Pupa - Larva - Adult
 - C. Larva - Pupa - Adult - Egg
 - D. Egg - Adult - Larva - Pupa
- 4. What is the mortality range for horses infected with Eastern Equine Encephalitis?**
 - A. 50-60%
 - B. 60-75%
 - C. 90-95%
 - D. 20-30%
- 5. Psorophora ferox larvae develop in which habitat?**
 - A. Larvae develop in temporary ponds.
 - B. Adults feed on small mammals.
 - C. Larvae develop in fast-flowing streams.
 - D. Larvae hatch directly in the air.
- 6. Bacterial proteins used as larvicides are characterized by what feature?**
 - A. Larvicide that must be consumed by larvae as an early instar
 - B. Contact killer that instantly kills adults
 - C. Insect growth regulator that disrupts reproduction
 - D. Bird bait for natural predators

7. Which genus is associated with Inland Floodwater Mosquito based on its scientific name?
- A. Aedes
 - B. Culex
 - C. Anopheles
 - D. Mansonia
8. ULV equipment calibration requires which basic items?
- A. A watch and 2 containers
 - B. A digital timer
 - C. A scale
 - D. A ruler
9. What disease can *Culiseta melanura* transmit?
- A. Eastern Equine Encephalitis
 - B. West Nile Virus
 - C. Malaria
 - D. Dengue
10. Conventional insecticides kill mosquitoes at which life stages?
- A. At any instar level
 - B. Only at early instars
 - C. Only at the pupal stage
 - D. Only on adults

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What are mosquito larvae commonly referred to as?

A. Wigglers

B. Maggots

C. Nymphs

D. Pupae

The main idea here is recognizing the common nickname for the aquatic larval stage of mosquitoes. Mosquito larvae are commonly called wigglers because they actively wriggle through the water as they feed and grow. This term specifically describes the larval form, which is the stage before becoming a pupa and then an adult. Maggots refer to fly larvae, which live in different environments and come from flies, not mosquitoes. Nymphs are immature stages in insects that undergo incomplete metamorphosis (like grasshoppers), not mosquitoes, which have complete metamorphosis (egg, larva, pupa, adult). Pupae are the life stage after larvae, before the adult, so they're not the right name for the larval stage.

2. Which two species have a flight variant less than 10-20 miles?

A. Aedes vexans and Ochlerotatus

B. Aedes aegypti and Aedes albopictus

C. Anopheles gambiae and Culex quinquefasciatus

D. Aedes aegypti and Anopheles gambiae

Understanding how far mosquitoes typically fly helps explain where they're likely to spread or stay contained. Some species are strong fliers and can move across neighborhoods or even larger areas, while others tend to stay close to where they breed. Aedes vexans and the Ochlerotatus group are examples of the latter. They generally remain near their breeding habitats and don't routinely travel many miles, often staying within a short radius—well under the 10–20 miles threshold. This makes them the best fit for a question about short-range flight. Other options involve species that can disperse more widely under normal conditions, so their typical flight range is not limited to such a small distance.

3. What is the lifecycle of a mosquito in the correct order?

A. Egg - Larva - Pupa - Adult

B. Egg - Pupa - Larva - Adult

C. Larva - Pupa - Adult - Egg

D. Egg - Adult - Larva - Pupa

The sequence begins with eggs laid on or near water, which hatch into aquatic larvae. Those larvae molt into pupae, another aquatic stage, and finally emerge as winged adults. So the order is eggs, then larvae, then pupae, then adults. This reflects how mosquitoes develop through four distinct life stages, each leading to the next, with adults appearing after the pupal stage. The other options break this natural progression—for example, placing pupae before larvae, starting with larvae, or having an adult come before any larval stage.

4. What is the mortality range for horses infected with Eastern Equine Encephalitis?

- A. 50-60%
- B. 60-75%
- C. 90-95%**
- D. 20-30%

Eastern Equine Encephalitis inflicts severe brain inflammation in horses, and once clinical disease appears, the outcome is dominated by death. The mortality range around 90-95% reflects how lethal the virus is in affected animals, so only a small number of horses survive—often with lasting neurologic problems. Vaccination and mosquito control are crucial preventive measures because the disease progresses rapidly and there's no highly effective cure once it develops. The other ranges underestimate how deadly the infection is, which is why this 90-95% range is the best match.

5. *Psorophora ferox* larvae develop in which habitat?

- A. Larvae develop in temporary ponds.**
- B. Adults feed on small mammals.
- C. Larvae develop in fast-flowing streams.
- D. Larvae hatch directly in the air.

Psorophora ferox is a floodwater mosquito, and its larvae develop in temporary ponds formed after rainfall. These short-lived pools provide a brief, nutrient-rich aquatic habitat where larvae can grow quickly before the water dries again. This ephemeral habitat is a hallmark of floodwater species and explains why temporary ponds are the correct environment for larval development. Fast-flowing streams don't provide the still-water conditions these larvae need; strong currents would wash them away. Larvae don't hatch directly in the air—the eggs require contact with water or moist substrate to hatch. And adult feeding behavior (on small mammals) doesn't describe where larvae develop, so it isn't about the larval habitat.

6. Bacterial proteins used as larvicides are characterized by what feature?

- A. Larvicide that must be consumed by larvae as an early instar**
- B. Contact killer that instantly kills adults
- C. Insect growth regulator that disrupts reproduction
- D. Bird bait for natural predators

*Bacterial larvicides work as ingestion-activated toxins. The crystal proteins produced by bacteria like *Bacillus thuringiensis israelensis* are harmless until a mosquito larva ingests them in the water. Inside the larval gut, the alkaline environment and gut enzymes activate the toxins, which then damage the gut lining and kill the larva. This means the products must be eaten by the larvae, with early instars being most susceptible due to higher feeding activity. They are not contact killers for adults, not growth regulators, and not bird bait. So the defining feature is that they must be consumed by larvae, especially in early instars.*

7. Which genus is associated with Inland Floodwater Mosquito based on its scientific name?

- A. Aedes**
- B. Culex
- C. Anopheles
- D. Mansonia

In binomial nomenclature, the genus is the first word of the scientific name. For the Inland Floodwater Mosquito, the scientific name is Aedes vexans, which places it in the genus Aedes. The second word, vexans, is the species epithet. So the genus you're identifying from the name is Aedes. (The other genera listed—Culex, Anopheles, Mansonia—would have different species names, not Inland Floodwater Mosquito.)

8. ULV equipment calibration requires which basic items?

- A. A watch and 2 containers**
- B. A digital timer
- C. A scale
- D. A ruler

Calibration of ULV equipment centers on measuring how much solution is emitted in a known period so you can set the correct flow rate. To do this reliably, you need a timing reference and a way to collect the sprayed output. A watch provides a simple, dependable time signal in the field, and two containers let you capture the spray during that timed interval so you can measure the delivered volume. Once you have the volume and the time, you can compute the flow rate and adjust the equipment accordingly. Other tools like a scale or ruler aren't the core needs for this basic step, and while a digital timer could substitute for a watch, the essential combination remains a timing device plus containers to collect the output.

9. What disease can Culiseta melanura transmit?

- A. Eastern Equine Encephalitis**
- B. West Nile Virus
- C. Malaria
- D. Dengue

Culiseta melanura is known as the primary vector for Eastern Equine Encephalitis virus in eastern North America. This mosquito feeds mostly on birds, sustaining an enzootic cycle of the virus within avian populations. Occasionally, the virus can spill over to humans or horses, but the species most closely associated with transmitting Eastern Equine Encephalitis in surveillance is this mosquito. In contrast, West Nile Virus is mainly carried by Culex mosquitoes; malaria is transmitted by Anopheles; and dengue by Aedes species. So the disease most strongly linked to Culiseta melanura is Eastern Equine Encephalitis.

10. Conventional insecticides kill mosquitoes at which life stages?

- A. At any instar level**
- B. Only at early instars
- C. Only at the pupal stage
- D. Only on adults

Conventional mosquito insecticides span both larval and adult control, so they can affect mosquitoes across different life stages. Larvicides are designed to kill larvae in the water, and these products are effective regardless of which larval instar the mosquito is in, since the larvae remain vulnerable while feeding through early, middle, and late instars. Adults can be knocked down by adulticides when they're present, but the larval stage isn't limited to a single instar. That broad activity across the larval development stages is why the best answer is that conventional insecticides can kill mosquitoes at any instar level.

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://gacat41pestcontrol.examzify.com>

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

SAMPLE