

Missouri FFA Entomology CDE Practice Exam (Sample)

Study Guide



Everything you need from our exam experts!

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. Which insect is in the order Hemiptera and has simple metamorphosis with sucking mouthparts?**
 - A. European Hornet**
 - B. Damsel Bug**
 - C. Damselfly**
 - D. Dragonfly**

- 2. Which insect belongs to the order Lepidoptera?**
 - A. White-Lined Sphinx Moth**
 - B. Water Strider**
 - C. Western Corn Rootworm**
 - D. Yellowjacket**

- 3. Which organism is the Velvet Ant?**
 - A. Tiger Moth**
 - B. Tiger Beetle**
 - C. Velvet Ant**
 - D. Walking Stick**

- 4. The Japanese Beetle belongs to which order?**
 - A. Hemiptera**
 - B. Coleoptera**
 - C. Lepidoptera**
 - D. Orthoptera**

- 5. Which species is a swallowtail butterfly?**
 - A. Tiger Swallowtail Butterfly**
 - B. Viceroy Butterfly**
 - C. True Armyworm**
 - D. Walking Stick**

- 6. Which Orthopteran is described as short-horned and has simple metamorphosis with chewing mouthparts?**
 - A. Differential Grasshopper**
 - B. Field Cricket**
 - C. Earwig**
 - D. Damsel Bug**

- 7. Bald-faced Hornet belongs to which order?**
- A. Hymenoptera**
 - B. Lepidoptera**
 - C. Coleoptera**
 - D. Hemiptera**
- 8. Which insect is a Mealybug?**
- A. Mealybug**
 - B. Luna Moth**
 - C. Leafhopper**
 - D. Japanese Beetle**
- 9. Which group of pests includes stink bugs that feed on soybeans and other crops?**
- A. Colorado potato beetle**
 - B. European corn borer**
 - C. Stink bugs**
 - D. Soybean aphid**
- 10. Which insect is in the order Orthoptera with simple metamorphosis?**
- A. Long-Horned Grasshopper**
 - B. Mealybug**
 - C. Luna Moth**
 - D. Lightningbug**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which insect is in the order Hemiptera and has simple metamorphosis with sucking mouthparts?

- A. European Hornet**
- B. Damsel Bug**
- C. Damselfly**
- D. Dragonfly**

Insects in Hemiptera have piercing-sucking mouthparts and undergo incomplete metamorphosis, meaning they develop from egg to nymphs to adults with no pupal stage. The damsel bug is a true bug with a slender body and a beak-like rostrum used to pierce prey and suck out fluids, which fits both the feeding adaptation and the life cycle pattern. European hornet is a Hymenopteran with chewing mouthparts and a complete metamorphosis (egg, larva, pupa, adult), while damselflies and dragonflies are in the order Odonata and have chewing mouthparts with an aquatic nymph stage, not piercing-sucking mouthparts or Hemipteran lineage.

2. Which insect belongs to the order Lepidoptera?

- A. White-Lined Sphinx Moth**
- B. Water Strider**
- C. Western Corn Rootworm**
- D. Yellowjacket**

Understanding Lepidoptera means recognizing insects with wings covered in tiny scales and a long, coiled feeding tube used to sip nectar. They undergo complete metamorphosis: egg, caterpillar, pupa, and adult. The White-Lined Sphinx Moth is a moth, which places it squarely in Lepidoptera. The other insects come from different orders: the Water Strider is a true bug in Hemiptera, the Western Corn Rootworm is a beetle in Coleoptera, and the Yellowjacket is a wasp in Hymenoptera. So the White-Lined Sphinx Moth best fits the Lepidoptera group.

3. Which organism is the Velvet Ant?

- A. Tiger Moth**
- B. Tiger Beetle**
- C. Velvet Ant**
- D. Walking Stick**

Velvet Ants are actually a group of solitary wasps in the Mutillidae family. They look ant-like, especially the wingless females, and are covered in dense, velvet-like hair. They belong to the order Hymenoptera, not to true ants, moths, beetles, or stick insects. So when asked which organism is the Velvet Ant, the correct choice is the one that carries the velvet ant name itself, since the others are completely different insects (a moth, a beetle, and a stick insect).

4. The Japanese Beetle belongs to which order?

- A. Hemiptera
- B. Coleoptera**
- C. Lepidoptera
- D. Orthoptera

The Japanese beetle is a beetle, so it belongs to the order Coleoptera. Beetles are defined by having forewings hardened into protective covers called elytra that meet along a straight line down the back, shielding the membranous hind wings. They also have chewing mouthparts and undergo complete metamorphosis (egg, larva, pupa, adult). In the Japanese beetle, you can see these features together: the hardened elytra and chewing mandibles, along with the life cycle that includes a grub stage in the soil and an above-ground adult. The other groups differ: true bugs in Hemiptera have piercing-sucking mouthparts and partially hardened wings, Lepidoptera have scaled wings, and Orthoptera have jumping hind legs and different wing structure.

5. Which species is a swallowtail butterfly?

- A. Tiger Swallowtail Butterfly**
- B. Viceroy Butterfly
- C. True Armyworm
- D. Walking Stick

Swallowtail butterflies are in the Papilionidae family and are known for the tail-like projections on their hindwings. The Tiger Swallowtail is a classic example of this group, a large butterfly with the distinctive yellow and black pattern and the hindwing tails that mark it as a true swallowtail. The Viceroy, while similar in size and color, is not a swallowtail — it belongs to a different butterfly family and does not have the long tails on the hindwings. The True Armyworm is not a butterfly at all; it's the larval stage of a moth. The Walking Stick is an insect in a different order (it imitates a twig and has no butterfly traits). So the species that is a swallowtail butterfly is the Tiger Swallowtail.

6. Which Orthopteran is described as short-horned and has simple metamorphosis with chewing mouthparts?

- A. Differential Grasshopper**
- B. Field Cricket
- C. Earwig
- D. Damsel Bug

Short-horned orthopterans are grasshoppers and their relatives that have antennae shorter than their bodies, chewing mouthparts, and undergo incomplete metamorphosis (egg, nymphs, then adult). The differential grasshopper fits these traits exactly: it's a grasshopper with short antennae, strong chewing mandibles, and a life cycle without a pupal stage. The field cricket has long antennae and would be categorized as long-horned, so it doesn't match the description. Earwig and damsel bug aren't Orthoptera and have different mouthparts or life cycles, so they don't fit either.

7. Bald-faced Hornet belongs to which order?

- A. Hymenoptera**
- B. Lepidoptera**
- C. Coleoptera**
- D. Hemiptera**

Bald-faced hornet belongs to Hymenoptera, the group that includes wasps, bees, and ants. This order is typically characterized by two pairs of wings with the hind wings connected to the forewings during flight, a narrow waist between the thorax and abdomen, and mouthparts adapted for chewing. Because bald-faced hornets are social wasps, they fit squarely into this order. In contrast, Lepidoptera are butterflies and moths with scaled wings, Coleoptera are beetles with hard forewings (elytra), and Hemiptera are true bugs with piercing-sucking mouthparts and a half-membranous wing arrangement.

8. Which insect is a Mealybug?

- A. Mealybug**
- B. Luna Moth**
- C. Leafhopper**
- D. Japanese Beetle**

A mealybug is a small, soft-bodied scale insect that is coated with a white, cottony wax, often with visible filaments around its body. This waxy coating is a hallmark of mealybugs and helps distinguish them from other pests. They feed on plant sap with piercing-sucking mouthparts and are typically found on stems and leaves where you can see the cottony, powdery masses. The luna moth is a large, green silk moth with eye spots on its wings, not waxy or cottony. Leafhoppers are small, wedge-shaped insects that hop away when disturbed. Japanese beetles are shiny metallic beetles with coppery or bronze wing covers. None of these have the characteristic waxy, cottony coating that identifies a mealybug.

9. Which group of pests includes stink bugs that feed on soybeans and other crops?

- A. Colorado potato beetle**
- B. European corn borer**
- C. Stink bugs**
- D. Soybean aphid**

Stink bugs are shield-shaped true bugs that feed on a wide range of crops, including soybeans, by piercing plant tissue with their mouthparts and sucking out sap. This feeding can injure seeds inside pods and reduce yield, making them a well-known pest group for soybeans and other crops. The other options are different insect groups that do not represent stink bugs: a beetle, a moth larva, and an aphid. So the best answer is the group known as stink bugs.

10. Which insect is in the order Orthoptera with simple metamorphosis?

A. Long-Horned Grasshopper

B. Mealybug

C. Luna Moth

D. Lightningbug

Orthoptera insects, like grasshoppers and katydids, undergo incomplete metamorphosis, meaning their life cycle is egg → nymph → adult, and the nymphs resemble small adults without a pupal stage. The long-horned grasshopper is a member of Orthoptera, so it fits both the order and the simple metamorphosis pattern. The other options come from different orders with different life cycles: the mealybug is a true bug (not Orthoptera) and shows gradual development; the luna moth is a moth (Lepidoptera) with complete metamorphosis; and the lightningbug is a beetle (Coleoptera) with complete metamorphosis.

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://missouriffaentomologycde.examzify.com>

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

SAMPLE