



DEPARTMENT OF HUMAN RESOURCES

Study Guide Pest Control Inspector I & II Written Examination

- This booklet contains SAMPLE QUESTIONS ONLY. Studying this booklet will not necessarily improve your exam score.

JULY 2018

PURPOSE AND CONTENT OF THIS STUDY GUIDE

This guide was developed to help you prepare to take the written exam for Pest Control Inspector I & II. It contains general exam-taking advice and also provides specific information related to the exam content. This information includes the subject areas covered by the exam, the kinds of questions to expect, strategies for approaching the questions, and sample questions. Though this information cannot guarantee a higher exam score, it can give you direction for your exam preparation that will assist you in doing your best.

PREPARING TO TAKE THE EXAM

Before the Day of the Exam

- Review this guide to get familiar with the content of the exam. Knowing about the topics and kinds of questions that will be in the exam will ensure that you will not be surprised by the content of the exam or the manner in which it is presented. This can improve your ability to demonstrate your job potential.
- Make sure that you know where the exam will be administered and all of the relevant details, such as where to park, where to report for the exam, and what identification is required.

On the Day of the Exam

- Make sure that you are well rested and have eaten. These things will help your concentration during the exam.
- Plan your day to allow plenty of time to get yourself prepared and get to the exam site. Allow enough time to cope with weather, traffic, parking, etc. Hurrying creates anxiety, so do not put yourself in the position of having to hurry.
- Listen carefully to all instructions from the exam administrator. Make sure that you understand the instructions and carry them out correctly. Ask questions at the proper time before the exam begins if you are unsure of any aspect of what you should do during the exam.

GENERAL EXAM TAKING TIPS

- Use your time carefully. The time limit should provide you with more than enough time if you move through the exam steadily and do not spend too much time on any one question.
- Read the questions and answer choices carefully. Read all of the answer choices before you select an answer.
- If you come to a question that is especially difficult, skip that question and come back to it later if you have time.
- Answer every question. Scores are based on the number of correct answers. You will receive no credit if you leave an answer space blank. It is to your advantage to use your best judgment to make a choice among the answer choices provided.

THE PEST CONTROL INSPECTOR I & II WRITTEN EXAM

The written exam for Pest Control Inspector I & II is based upon a job study that identified the most important knowledge, skills, and abilities required to perform the job successfully. These areas include:

- your ability to accurately read and interpret written information.
- your knowledge of safety practices related to working with pesticides in a field environment.
- your knowledge of basic pest control concepts.

All of the exam questions are presented in a multiple-choice format. Each question is identified by a question number that is followed by a question statement. After the question statement, there are between two and four answer choices. You should read all of the answer choices and then choose the best answer. **Each question has only one correct answer.**

EXAM SECTION 1: READING WITH UNDERSTANDING

This exam section contains twenty (20) questions designed to assess your ability to accurately read and interpret written information. The exam questions will be based on brief reading passages similar to the type of reading that is encountered on the job such, as instructions, policies and procedures, and technical information related to pest control.

A good strategy to use for this type of question is to read through the entire reading passage, then read each of the questions, and finally refer back to the passage as you answer each question. When reading each question, determine what information the question is specifically looking for by giving careful consideration to each of the words used to convey meaning. Does the question ask about a cause or effect? Does it ask you to identify the correct method or sequence for performing tasks?

It is important that you select your answer solely based upon the information provided. The exam questions are designed to assess your ability to correctly interpret what is provided, not to assess your knowledge of the subject area addressed by the reading passage.

Examples of these types of questions are shown below. Each question is followed by a brief explanation of the correct answer.

Minimizing Spread of the Dengue Virus

Preventing transmission of the dengue virus is dependent upon controlling the mosquito population and interrupting human-vector contact. In this region, the primary vector of dengue is the mosquito species *Ae. aegypti*, though other potential vectors such as *Ae. albopictus* are possible. *Ae. aegypti* proliferates in purposely-filled household containers such as those used for domestic water storage or decorative plants. It may also flourish in a variety of rain-filled habitats including blocked gutters or discarded items such as tires or food and beverage containers. These mosquitos do not fly far, with most remaining within a few hundred feet of where they emerge. They feed mostly during daylight hours and almost exclusively on humans.

1. According to the reading passage, which of the following is correct regarding the number of mosquito species that can transmit the dengue virus?
 - A. Only one species transmits the virus.
 - B. Only one species in the area is known to transmit the virus.
 - C. Two species in the region are known to transmit the virus.
 - D. The virus may be transmitted by several species.

Answer: The correct answer to sample question #1 is response choice "D". The question asks about the number of species that can transmit the virus. This information is located in the second sentence of the paragraph. *Ae. aegypti* is identified as the most common transmitter of the virus, but the sentence also indicates that other vectors are possible. Since the reference to additional vectors is plural, it can be concluded that three or more species may transmit the virus, making response choice "D" the correct answer.

2. Based on the reading passage, which of the following actions would be most effective for reducing transmission of the dengue virus?
 - A. Using less water for landscaping.
 - B. Staying indoors at dawn and dusk.
 - C. Removing containers with standing water.
 - D. Storing garbage containers farther from residences.

Answer: The correct answer to sample question #2 is response choice "C". The reading passage indicates that transmission can be prevented by controlling the mosquito population and that the primary transmitter of the virus "proliferates" or grows rapidly in "purposely-filled household containers" and "rain-filled habitats". Thus, removing water-filled containers is the most effective action. The other response choices do not effectively control of the mosquito population or limit mosquito contact with humans based on the characteristics described in the passage.

Maintaining Nozzle Tips

Nozzles should be checked before each use to make sure that they are functioning properly. This is done by examining the nozzle and comparing the actual flow per minute to the flow range indicated by the manufacturer. Worn nozzles will result in a greater amount of chemical sprayed and will often produce an irregular spray pattern. If the flow during the exam exceeds the maximum expected flow indicated by the manufacturer for a new tip by more than five percent, the tip should be replaced. Blockages in the nozzle will result in less flow. If the flow is more than ten percent less than the low point of the indicated range, the nozzle should be cleaned and re-examined.

3. According to the reading passage, if the nozzle tip flow range indicated by the manufacturer is 45-50 ounces per minute and the nozzle flow during the exam is 55 ounces per minute, what action should be taken?
- A. The nozzle should be replaced.
 - B. The exam should be redone to confirm the result.
 - C. The nozzle should be cleaned and then re-examined.
 - D. No action should be taken since the nozzle is functioning within an acceptable range.

Answer: The correct answer to sample question #3 is response choice "A". Based on the information in the reading passage, the acceptable range for the nozzle is 41.5 ounces per minute (ten percent of 45) to 52.5 ounces per minute (five percent of 50). The flow during the exam is 55, which exceeds the maximum range indicated by the manufacturer by more than five percent.

EXAM SECTION 2: WORKPLACE SAFETY

This exam section contains twenty (20) questions that evaluate your knowledge of safety practices related to working with pesticides in a field environment. The exam questions will ask you to identify the best methods for safely performing physical tasks, working outdoors, handling pesticides, and responding to hazards or accidents.

A good strategy for answering questions in this section is to create a picture in your mind of the situation described in a question and its response options. This should help you to clarify what types of hazards might be associated with the situation. You should then consider the best method for minimizing the hazard by considering how it is affected by the different response choices.

Examples of the types of questions in this exam section are shown below. Each question is followed by an explanation of the correct answer.

4. All of the following are symptoms of heat exhaustion, except:
- A. nausea.
 - B. cramping.
 - C. headache.
 - D. weakness.

Answer: The correct answer to sample question #4 is response choice "B". A common hazard associated with working outdoors is the effect of severe weather on the body. Therefore, it is important to know how to prevent conditions such as heat exhaustion, heat stress, sunburn, and dehydration. An important aspect of prevention is to recognize symptoms of the conditions so that appropriate action can be taken. The effects of extreme weather, the types of conditions it can produce, and symptoms of those conditions are all described in materials provided online by the Occupational Health and Safety Administration (OSHA) and the Centers for Disease Control (CDC). In such materials, one would find that nausea, headache, and weakness are all symptoms of heat exhaustion.

5. The safest way to remove a tick that is attached to your skin is to:
- A. coat the tick with petroleum jelly.
 - B. burn the tick with the flame from a match.
 - C. scrape the tick off with a flat surface such as a credit card.
 - D. grasp the tick with tweezers as close to the skin as possible.

Answer: The correct answer to sample question #5 is response choice "D". A common hazard associated with working outdoors is insect bites and stings. Therefore, it is important to know how to properly treat bites or stings from different types of insects. A tick embeds its head under the skin and must be promptly and carefully removed. The recommended technique is to use tweezers to pull the tick out. The other response choices pose the risk of additional injury by leaving the tick in place too long or breaking the head off under the skin. Methods for treating insect bites and stings are described in materials provided online by the Occupational Health and Safety Administration (OSHA) and the Centers for Disease Control (CDC).

6. You will be most likely to prevent injury when lifting a heavy object if you avoid:
- A. raising the object to waist height.
 - B. holding the object close to your body.
 - C. twisting or turning while carrying the load.
 - D. standing with your feet placed widely apart.

Answer: The correct answer to sample question #6 is response option "C". Twisting or turning while lifting may cause injury to your lower back. All of the other response options are recommended techniques for safe lifting. Methods for safe lifting are described in materials provided online by the Occupational Health and Safety Administration (OSHA).

7. Work clothes used during the application of pesticides should be:
- A. washed after each use.
 - B. professionally dry-cleaned.
 - C. soaked before they are washed.
 - D. brushed off before they are laundered.

Answer: The correct answer to sample question #7 is response option "A". The pesticides used to control vectors are toxic chemicals. The application of pesticides often results in chemicals coming into contact with clothing and permeating fabric. Therefore, it is important that clothing worn during pesticide application be washed after each use. You should be familiar with the types of protective clothing used for pesticide application and how to use and care for it properly.

EXAM SECTION 3: BASIC PEST CONTROL CONCEPTS

This exam section contains twenty (20) questions that assess your knowledge of basic pest control concepts. Exam questions will address the types of illnesses commonly associated with disease-carrying vectors such as mosquitos and rodents, methods for controlling vectors, and basic biology related to vectors, such as life cycles and habitat. This information can be found in textbooks or online resources.

Examples of the types of questions in this exam section are shown below. Each question is followed by a brief explanation of the correct answer.

8. A biological control of a vector is based upon the:
- A. elimination of preferred breeding areas of the target species.
 - B. application of a pesticide that affects the larvae of the target species.
 - C. introduction of an organism that preys upon or competes with the target species.
 - D. education of the community on how to minimize contact with the target species.

Answer: The correct answer to sample question #8 is response choice "C". A key concept in pest control is the various methods used to control vectors. A biological control involves the introduction of another organism that reduces the population of the target species by preying upon it or competing with it in the habitat. An example of this is the introduction of certain types of fish that feed upon mosquito larvae.

9. Which of the following is most likely to contribute to the control of the rodent population at a residence?
- A. Covering dirt areas with vegetation.
 - B. Building fences with wood instead of brick.
 - C. Harvesting fruit from trees as soon as it is ripe.
 - D. Removing trees that are within fifteen feet of the home.

Answer: The correct answer to sample question #9 is response choice "C". Control of rodents is best achieved by eliminating sources of food, water, and shelter. Fruit left on trees provides an ample food source for rodents. The other response choices do not control for any of the noted factors.

10. In the mosquito life cycle, pupa usually transform into adult mosquitos within:
- A. a few hours.
 - B. 24 hours.
 - C. a few days.
 - D. a week.

Answer: The correct answer to sample question #10 is response choice "C". It is important to know the stages and characteristics of the mosquito life cycle in order to devise appropriate methods to disrupt it. Adult mosquitos lay eggs that become larvae. In less than a week, hatchling larvae become pupa. Finally, pupa become adults within a few days.

ADDITIONAL ASSISTANCE

If you feel that you would benefit from more practice, your local library or relevant internet web sites may have reference materials that can be helpful. This is true for all of the subject areas covered by the Pest Control Inspector I written exam.