

Illinois Department of Public Health
GENERAL STANDARDS PRACTICE EXAMINATION

This is a PRACTICE EXAM. Correct answers are listed at the end of this exam. To pass the Exam, you must score 70 percent or more, that is, you must answer 53 of 75 questions correctly.

READ THIS FIRST

“IDPH” is the Illinois Department of Public Health. “USDA” is the United States Department of Agriculture. “IDA” is the Illinois Department of Agriculture. “USEPA” is the United States Environmental Protection Agency. “IDNR” is the Illinois Department of Natural Resources.

For all questions, choose the best answer. DO NOT WRITE ON THIS EXAM BOOKLET.

SECTION I: PESTS

- [1] Which is *true* about insect **molting**?
- A) adult insects don't molt because they don't grow
 - B) insects molt mainly because they need to exfoliate
 - C) molting is the transformation from pupa to adult
 - D) the main reason insects molt is to replace lost legs
- [2] Insects differ from other **arthropods** because insects:
- A) have a two-part body
 - B) have six legs
 - C) undergo molting
 - D) all of the above
 - E) none of the above
- [3] **Flies** differ from other insects because flies have:
- A) nymph and larva stages
 - B) real brains
 - C) short antennae
 - D) piercing mouthparts
 - E) only two wings
- [4] Insects that develop by **complete metamorphosis**...
- A) ...have no egg stage, and are born as larvae.
 - B) ...have larvae that feed, grow and molt.
 - C) ...have egg, nymph and adult stages.
 - D) ...have immature stages resembling the adults.
- [5] Which is not a common way that **house mice** are harmful to people and property?
- A) house mice cause fires
 - B) house mice gnaw on things
 - C) house mice consume our food
 - D) house mice transmit Hanta virus

- [6] Which is *true* of **house mice**?
- A) they store food (and sometimes rodent bait) in various locations
 - B) they prefer to consume 2 ounces of food daily in one spot
 - C) they often travel up to 150 yards for food and water
 - D) they are usually very cautious about new objects in their territory
- [7] **Deer mice**...
- A) ...have larger bodies and smaller ears than house mice.
 - B) ...are typically found in inner-city dwellings.
 - C) ...carry rabies virus and black plague bacteria.
 - D) ...have a two-toned body and tail, and white belly.
- [8] Which birds are protected by state or federal laws?
- A) pigeons
 - B) woodpeckers
 - C) house sparrows
 - D) European starlings
 - E) none of the above
- [9] Which statement is true about **bed bugs**?
- A) adults are about the size and shape of an apple seed
 - B) their bites always occur in groups of three
 - C) they prefer to feed on bats, but will bite humans
 - D) they easily ingest dust pesticides while grooming
- [10] When their nests can't be found and treated directly, what works to control household ants such as **pavement ants**, **odorous house ants** and **pharaoh ants**?
- A) spraying where the ants are trailing
 - B) soil injection with termiticides
 - C) liquid, gel or granular ant baits
 - D) total-release aerosol foggers
- [11] **Honey bee** nests in structures should be carefully and completely removed because...
- A) ...the IDA may impose fines for destroying honey bee hives.
 - B) ...rotting honey can cause damage and attract scavenger pests.
 - C) ...honey bees are protected and careless removal of nests can kill them.
 - D) all the above
- [12] Which of these Illinois spiders should be considered *dangerous* ?
- A) hobo spider
 - B) wolf spiders
 - C) funnel web spiders
 - D) daddy long-legs spiders
 - E) none of the above

- [13] Insecticides for **flea** control are usually best applied...
- A) ...to treatable areas where infested cats and dogs spend time lying down.
 - B) ...by spraying the dogs or cats directly with a fast-acting contact pesticide.
 - C) ...by broadcast spraying all baseboards, carpeting, flooring, and the yard.
 - D) ...to inaccessible areas such as wall voids and behind baseboards.
- [14] Adult females of this roach are black with wings that cover about half the abdomen.
- A) German cockroach
 - B) Oriental cockroach
 - C) brown-banded cockroach
 - D) woods cockroach
 - E) American cockroach

SECTION II: INTEGRATED PEST MANAGEMENT

- [15] **Integrated Pest Management** (IPM) is not being done unless...
- A) ...sanitation and exclusion are performed by the client prior to pesticide application.
 - B) ...the pest management plan calls for no pesticide use after the initial treatment.
 - C) ...sticky traps are used to monitor pest numbers and the effectiveness of methods.
 - D) ...a variety of control methods are considered in determining which is/are best to use.
- [16] Even when IPM is used, why would pesticides be applied more often for control of *structural* pests than for control of *agricultural* pests?
- A) structural pests are more common – there are millions of pest species
 - B) structural pesticides are less expensive, safer and easier to use
 - C) all structural pests affect human health, agricultural pests do not
 - D) action thresholds are more easily exceeded in structural pest control
- [17] You inspect and find lots of adult **carpet beetles** in a house. Applying the principles of IPM to eliminate these pests, you first decide to...
- A) ...fog the house with a contact pesticide because it leaves no pesticide residue.
 - B) ...use a light trap to capture the beetles because this does not require pesticide use.
 - C) ...consult with the customer and inspect to find what the beetles are feeding on.
 - D) ...tell the customer the beetles will be gone if someone cleans and vacuums the place.
- [18] For a pest management professional, a **sighting log** can be a useful tool for...
- A) ...monitoring the effectiveness of your pest management plan.
 - B) ...reducing the time you spend inspecting for pest activity.
 - C) ...pinpointing areas of pest activity requiring your attention.
 - D) all the above.

- [19] Although you found no evidence, a teacher says you must spray the school bus because children with head lice rode on it. What should you do?
- A) treat the bus because this as an imminent threat to children's health
 - B) ask the school to provide parental notification so you can return and treat the bus
 - C) place sticky traps in the bus to catch the lice, and fog it to get the lice moving
 - D) advise that the bus could be vacuumed, but no pesticide treatment is necessary
- [20] Which of the following are **environmental** methods of managing pests?
- A) using fungi to infect and kill pests
 - B) cleaning up spilled liquor
 - C) vacuuming to suck up and kill fleas
 - D) applying a growth regulator
 - E) none of the above
- [21] Using a **light trap** to catch flies is an example of what type of control?
- A) environmental
 - B) cultural
 - C) biological
 - D) chemical
 - E) mechanical
- [22] When IPM is used to manage a pest, what is being *integrated*?
- A) different control methods
 - B) different types of pesticides
 - C) sanitation and exclusion
 - D) control and prevention
 - E) monitoring and evaluation

SECTION III: PESTICIDES

- [23] A pesticide's **formulation** is its:
- A) target pest or purpose
 - B) mixture of ingredients
 - C) mode of application
 - D) mode of action
 - E) all of the above
- [24] In structural pest control, a **granular** pesticide might be best used for control of:
- A) crickets in mulch around a foundation
 - B) boxelder bugs feeding on a tree
 - C) mosquito larvae in a flooded ditch
 - D) white grubs damaging a lawn

- [25] Which statement is *true* of **dust** pesticides?
- A) all dusts work by dehydrating the target pest
 - B) dusts provide a physical barrier to exclude pests
 - C) some dusts can remain active against pests indefinitely
 - D) dusts are effective for controlling pests in air ducts
- [26] Which of the following may occur as a liquid, gel, powder and granular?
- A) soluble powder
 - B) bait
 - C) wettable powder
 - D) emulsifiable concentrate
- [27] Some **baits** are designed to kill pests *slowly*, so the bait...
- A) ...won't kill non-target organisms.
 - B) ...is the least-toxic pesticide available.
 - C) ...remains active for a long time.
 - D) ...is distributed throughout insect colonies.
- [28] What is most important when **baiting** pests such as ants or cockroaches?
- A) finding where the pest built its nest
 - B) placing bait where the pest will find it
 - C) using several different types of bait
 - D) replacing the bait daily to keep it fresh
- [29] A **liquid flowable** or **suspended concentrate** is most similar to what other formulation?
- A) wettable powder
 - B) emulsifiable concentrate
 - C) liquid bait
 - D) ultra-low volume
 - E) aerosol fogger
- [30] What is an **ultra-low volume** formulation?
- A) a pesticide that's applied at the lowest possible label rate
 - B) any pesticide that releases its active ingredients into the air
 - C) a pesticide that releases its active ingredient slowly over time
 - D) a pesticide producing a mist or fog using specialized equipment
- [31] Applying a pesticide as a **foam** is sometimes advantageous because foam...
- A) ...uses less active ingredient than liquids.
 - B) ...provides good coverage in voids and spaces.
 - C) ...is much easier to apply than other pesticides.
 - D) ...never soaks into soil or porous surfaces.

- [32] What type of pesticide is more likely to cause an explosion?
- A) total-release aerosol
 - B) dust
 - C) emulsifiable concentrate
 - D) anticoagulant
 - E) tracking powder
- [33] This pesticide can immediately eliminate pests inside a structure, though the structure can be re-infested immediately after application:
- A) fumigant
 - B) desiccant
 - C) growth regulator
 - D) foam
 - E) granular
- [34] What is an **anticoagulant**?
- A) a pheromone or lure that attracts pests
 - B) a type of antidote for rodenticide poisoning
 - C) a substance that hinders the clotting of blood
 - D) an inert ingredient that improves a formulation
- [35] Which could be considered a type of **contact pesticide**?
- A) growth regulator
 - B) fumigant
 - C) dust
 - D) liquid residual
 - E) granular
- [36] What pests are controlled with **avicides**?
- A) mites and ticks
 - B) snails and slugs
 - C) pillbugs and sowbugs
 - D) moles and voles
 - E) none of the above

SECTION IV: SAFETY

- [37] Which statement is *true* about the pesticides used in structural pest control?
- A) if label directions are followed, there will be no human exposure
 - B) even the least hazardous pesticide can cause human harm
 - C) most pesticides are safe if their signal word is CAUTION
 - D) the toxicity of most pesticides is low, and some are non-toxic

- [38] The *higher* a pesticide's **LD 50**...
- A) ...the more toxic it is.
 - B) ...the less toxic it is.
 - C) ...the higher the risk of exposure.
 - D) ...the lower the risk of exposure.
- [39] Which statement is *true* ?
- A) highly toxic pesticides are not always the most hazardous pesticides
 - B) hazard is determined by a pesticide's safety and risk of exposure
 - C) acute pesticide exposure is usually more serious than chronic exposure
 - D) following label directions is one way to decrease a pesticide's LD 50
- [40] Which is *true* about a pesticide label that does not have a **signal word**?
- A) it is mislabeled and must be reported to the USEPA
 - B) it is not governed by state pesticide regulations
 - C) it is non-toxic and considered safe
 - D) none of the above
- [41] What PPE is generally best to wear when working with pesticide concentrates?
- A) vented goggles, chemical-resistant gloves
 - B) unvented goggles, cloth gloves
 - C) safety glasses with side shields, nitrile gloves
 - D) face shield, heavy leather gloves
 - E) stylish sunglasses, fur-lined gloves
- [42] A way to avoid being infected with **Hanta virus** is to...
- A) ...never sweep an infested structure with a broom
 - B) ...wear a respirator that has a HEPA filter
 - C) ...avoid handling trapped deer mice
 - D) ...wear safety glasses, goggles or a face shield
 - E) ...all the above
- [43] Eye protection should be worn when applying **aerosol** pesticides to cracks and crevices, to avoid pesticide exposure from:
- A) over-applying
 - B) blowback
 - C) leaching
 - D) runoff
 - E) all of the above

- [44] When laundering pesticide-contaminated clothing...
- A) ... if possible, rinse them outdoors with a hose before washing.
 - B) ...keep pesticide-contaminated clothing separate from other clothing.
 - C) ...wash the clothing in hot water and use a strong detergent.
 - D) ...if possible, dry the washed clothing outdoors instead of in a dryer.
 - E) all the above
- [45] What's the best thing to do with the rinse water (rinsate) when triple-rinsing a pesticide container for disposal?
- A) apply it according to the pesticide's label directions
 - B) pour it into a clean, labeled milk jug for storage
 - C) pour it onto absorbent material and place it in the trash
 - D) since it's mostly water, it can be poured down a drain
- [46] What is a good way to reduce the **hazard** associated with pesticides?
- A) use a contact pesticide rather than one with residual activity
 - B) use a ready-to-use pesticide rather than mixing from concentrate
 - C) ensure pesticides are inaccessible in your unattended vehicle
 - D) don't store pesticides in passenger-occupied areas of vehicles
 - E) all the above
- [47] Per the Structural Pest Control Code, when pesticides are stored at business locations...
- A) ...labels for stored pesticides must be on file.
 - B) ...pesticides can be stored on the floor if it has a drain.
 - C) ...structural pesticides can be stored with garden pesticides.
 - D) ...PPE must be stored in the room with the pesticides.
- [48] Which is not required to be kept on **service vehicles** that transport pesticides?
- A) an extra pair of shoes
 - B) a pesticide label file
 - C) emergency medical information
 - D) a backflow preventer
 - E) absorbent material
- [49] The label directions of termiticides designed to bind to soil state that these termiticides should not be applied to water-saturated soil. Why?
- A) the applicator would have to adjust the volume and rate of termiticide applied
 - B) with water-saturated soil the risk of blowback makes the application too hazardous
 - C) water-saturated soil reduces adsorption and that would result in increased leaching
 - D) excessive water in the soil would cause drift of termiticide to non-target areas

- [50] What prevents pesticides from remaining active forever?
- A) water
 - B) microbes
 - C) oxygen
 - D) solar radiation
 - E) all the above
- [51] A pesticide spill must be reported to the Illinois Department of Public Health if...
- A) ...it might cause human harm
 - B) ...it might cause harm to pets
 - C) ...it might cause harm to non-target wildlife
 - D) ...it causes human harm
 - E) all the above

SECTION V: LABELS

- [52] Which statement is *true* about **pesticide labeling**?
- A) labeling refers only to the label on the pesticide container
 - B) always follow the directions on the *newest* version of a product's label
 - C) using a pesticide in a manner inconsistent with its labeling violates federal law
 - D) all the above
- [53] A **Safety Data Sheet** (formerly known as a Material Safety Data Sheet) tells you:
- A) a pesticide's properties and hazards
 - B) how to store and dispose of a pesticide
 - C) all of a pesticide's inert ingredients
 - D) none of the above
- [54] Because of its importance, this section on a pesticide label is usually found just below the Signal Word. It tells the user what to do if someone is exposed to the pesticide:
- A) precautionary statements
 - B) statement of practical treatment
 - C) misuse statement
 - D) re-entry statement
 - E) hazard statement
- [55] How do you know if a pesticide is a **general-use pesticide**?
- A) the signal word CAUTION appears in large letters on the label
 - B) "For professional use only by certified applicators" appears on the label
 - C) "GENERAL USE PESTICIDE" appears in large letters on the label
 - D) "RESTRICTED USE PESTICIDE" does not appear on the label

- [56] "APIS-X is a pesticide that is harmful to bees. Application to flowering plants is not permitted." In what section of the APIS-X label would this information appear?
- A) misuse statement
 - B) environmental hazards statement
 - C) statement of practical treatment
 - D) re-entry statement
 - E) use classification statement

THE NEXT FIVE QUESTIONS REFER TO THE FOLLOWING MIXING INSTRUCTIONS:

Use a 0.03% rate (1/6 fl oz or 4.75 ml per gallon of water) for general pest control.

For exterior perimeter treatments, apply 2 to 10 gallons of finished spray per 1000 square feet.

For termite control or heavy infestations of other pests, use the 0.06% rate (0.33 fl oz or 9.5 ml per gallon of water).

- [57] For a *heavy* infestation of fleas, how many ounces of concentrate should you add to water to fill a *2-gallon sprayer*?
- A) 0.16
 - B) 0.33
 - C) 0.66
 - D) 1.32
 - E) 9.5
- [58] To treat a localized area of termite activity, **one ounce of concentrate** is required. How many gallons of water are needed?
- A) 1.5
 - B) 3
 - C) 5
 - D) 10
 - E) 20
- [59] You will need 300 gallons of finished spray to treat a structure for termites. How many ounces of concentrate are needed?
- A) 24
 - B) 48
 - C) 67
 - D) 96
 - E) 99

- [60] You will need 2 gallons of dilute material to control silverfish in an attic. If this is not a heavy infestation, how much concentrate is required?
- A) 1/3 fl oz
 - B) 4.75 ml
 - C) 0.16 fl oz
 - D) 19 ml
 - E) 1/12 fl oz
- [61] A structure measures 40 feet by 30 feet. How many gallons will you use if you apply a rectangular band 1 foot up the foundation and 3 feet out from the foundation as a perimeter treatment at the highest allowable rate?
- A) 5
 - B) 6
 - C) 7
 - D) 8
 - E) 10

SECTION VI: REGULATIONS

- [62] What are the suggested study materials for persons taking the General Standards Exam?
- A) Structural Pest Control Act and Code
 - B) Illinois General Standards Manual for Structural Pest Control
 - C) Pest Fact Sheets from the Illinois Dept. of Public Health website
 - D) all the above
- [63] Becoming a **minimally Certified Technician** does not allow you to:
- A) use general-use pesticides without supervision
 - B) supervise uncertified technicians at your business location
 - C) take a sub-category exam after fulfilling all requirements
 - D) use restricted-use pesticides without supervision
- [64] Which statement is correct regarding pest control licensing and certification?
- A) the Illinois Dept. of Public health certifies people for commercial control of mosquitoes
 - B) bats are the only wildlife that IDPH-certified technicians are allowed to exterminate
 - C) the Illinois Dept. of Agriculture regulates control of turf and ornamental pests
 - D) bird control permits are issued by the Illinois Structural Pest Control Advisory Council
- [65] Persons legally permitted to use a **restricted-use pesticide** for rodent control without supervision are those that...
- A) ...are fully certified in any structural pest control sub-category.
 - B) ...are minimally certified after passing the General Standards Exam.
 - C) ...have at least 6 months of experience doing structural pest control.
 - D) ...are fully certified in the Insects and Rodents sub-category.

- [66] What federal law governs the use of pesticides?
- A) FIFRA
 - B) FIPM
 - C) DSTAR
 - D) SASE
 - E) SNAFU
- [67] Per the Structural Pest Control Act, you are doing "structural pest control" when you:
- A) use a *device* to control a structural pest
 - B) apply a *pesticide* to control a structural pest
 - C) use a *repellent* to manage house sparrows
 - D) advertise or solicit to do structural pest control
 - E) all the above
- [68] A structural pest control license is required to prevent, repel, mitigate, curb, control or eradicate which of the following from the property of another?
- A) bats
 - B) Canada geese
 - C) wood-destroying fungi
 - D) moles
 - E) none of the above
- [69] If a commercial structural pest control business loses its only Certified Technician, the business should...
- A) ...stop doing structural pest control until it hires another Certified Technician.
 - B) ...stop using all restricted-use pesticides when servicing its customers.
 - C) ...apply for a new structural pest control business license within 7 days.
 - D) ...stop doing structural pest control until the lost technician is reported to the IDPH.
- [70] If the home or employment address of a Certified Technician changes, he/she must:
- A) apply for a new certificate and pay a replacement fee
 - B) ensure he/she carries their certification card until it is corrected
 - C) telephone the Illinois Dept. of Public Health within 7 days
 - D) notify the Illinois Dept. of Public Health in writing within 15 days
- [71] The **Environmental Protection Act** prohibits structural pesticides from being...
- A) ...used for the control of mosquito eggs, larvae and adults.
 - B) ...stored too close to wells and community water supplies.
 - C) ...used by uncertified or unemployed pest control technicians.
 - D) ...applied in a day care center when children are present.

- [72] Which is correct about a pest management professional servicing a *public school*?
- A) the PMP must serve as the school's "IPM Coordinator"
 - B) the PMP's service must adhere to the principles of IPM
 - C) the PMP must not apply pesticides when children are present
 - D) none of the above
- [73] Which is required when applying a dust pesticide in a patient room at a health care facility?
- A) the patient must be removed from the room before the application
 - B) a sign must be posted warning people to keep out for at least 2 hours
 - C) labels and safety data sheets must be provided to a facility employee in charge
 - D) all of the above
- [74] Certified Technicians provide **on-the-job training** to new, uncertified technicians by...
- A) ...ensuring they are within one hour's travel in case something goes wrong.
 - B) ...supervising them on-site as they perform 2 services of appropriate types.
 - C) ...ensuring the uncertified technician is provided with written instructions.
 - D) ...signing and adding their CT number to the technician's service records.
- [75] When the supervising Certified Technician is not on-site for services performed by an uncertified technician, the supervising technician must ensure that:
- A) the uncertified technician has the labels of all pesticides applied
 - B) the CT can be contacted by the uncertified technician
 - C) if needed, the CT can be at the job site within one hour
 - D) all of the above

ANSWERS ON NEXT PAGE

ANSWERS**SECTION I: PESTS**

1-A, 2-B, 3-E, 4-B, 5-D, 6-A, 7-D, 8-B, 9-A, 10-C, 11-B, 12-E, 13-A, 14-B

SECTION II: IPM

15-D, 16-D, 17-C, 18-D, 19-D, 20-B, 21-E, 22-A

SECTION III: PESTICIDES

23-B, 24-A, 25-C, 26-B, 27-D, 28-B, 29-A, 30-D, 31-B, 32-A, 33-A, 34-C, 35-B, 36-E

SECTION IV: SAFETY

37-B, 38-B, 39-A, 40-D, 41-C, 42-E, 43-B, 44-E, 45-A, 46-E, 47-A, 48-D, 49-C, 50-E, 51-E

SECTION V: LABELS

52-C, 53-A, 54-B, 55-D, 56-B, 57-C, 58-B, 59-E, 60-A, 61-B

SECTION VI: REGULATIONS

62-D, 63-D, 64-C, 65-D, 66-A, 67-E, 68-C, 69-A, 70-D, 71-B, 72-D, 73-D, 74-B, 75-D

Explanation of label calculation questions 57-61:

57) rate = 0.33 ounces per gallon x 2 gallons = 0.66 ounces

58) rate = 0.33 ounces per gallon 1 ounce / 0.33 ounce = 3 gallons

59) rate = 0.33 ounces per gallon x 300 gallons = 99 ounces

60) rate = 1/6 ounce per gallon x 2 gallons = 1/3 ounce

61) 40 feet x (3 feet out + 1 foot up = 4 feet) = 160 square feet x 2 sides = 320 square feet
 30 feet x (3 feet out + 1 foot up = 4 feet) = 240 square feet x 2 sides = 240 square feet
 Four corners: 3 feet x 3 feet = 9 square feet x 4 corners = 36 square feet

320 + 240 + 36 = 596 square feet rate = 2 to 10 gallons per 1000 square feet

596 square feet / 1000 square feet = .596 x 10 gallons (the highest rate) = 5.96 gallons