

## Pest Certified Operator Practice Exam

1. Describe in detail how you would perform an initial cleanout on a structure infested with German and/or brown-banded cockroaches.
2. Define metamorphosis. Define the following types of metamorphosis, including the stages of each stage and 2 examples of insects for each type of metamorphosis.
3. Define pre-baiting as it applies to the control of rodents. Give specific details of its purpose and use.
4. Explain in detail the difference between a young rat and a house mouse.
5. German roaches are
  - a. Approximately  $\frac{1}{2}$  inch long with 2 dark longitudinal stripes on the pronotum
  - b. Approximately 1 -1  $\frac{1}{2}$  inches long with reddish-brown with a yellow border on the pronotum
  - c. Approximately  $\frac{1}{2}$  long with 2 transverse bands across the base of the wings and abdomen
  - d. Approximately  $\frac{3}{4}$  to 1" long dark brown or black with female having triangular wing pads
  - e. Approximately 1 inch long with a uniform mahogany brown color
6. Brown-banded roaches are
  - a. Approximately  $\frac{1}{2}$  inch long with 2 dark longitudinal stripes on the pronotum
  - b. Approximately 1 -1  $\frac{1}{2}$  inches long with reddish-brown with a yellow border on the pronotum
  - c. Approximately  $\frac{1}{2}$  long with 2 transverse bands across the base of the wings and abdomen
  - d. Approximately  $\frac{3}{4}$  to 1" long dark brown or black with female having triangular wing pads
  - e. Approximately 1 inch long with a uniform mahogany brown color
7. American roaches are
  - a. Approximately  $\frac{1}{2}$  inch long with 2 dark longitudinal stripes on the pronotum
  - b. Approximately 1 -1  $\frac{1}{2}$  inches long with reddish-brown with a yellow border on the pronotum
  - c. Approximately  $\frac{1}{2}$  long with 2 transverse bands across the base of the wings and abdomen
  - d. Approximately  $\frac{3}{4}$  to 1" long dark brown or black with female having triangular wing pads
  - e. Approximately 1 inch long with a uniform mahogany brown color

8. Smokey brown roaches are
  - a. Approximately  $\frac{1}{2}$  inch long with 2 dark longitudinal stripes on the pronotum
  - b. Approximately 1 -1  $\frac{1}{2}$  inches long with reddish-brown with a yellow border on the pronotum
  - c. Approximately  $\frac{1}{2}$  long with 2 transverse bands across the base of the wings and abdomen
  - d. Approximately  $\frac{3}{4}$  to 1" long dark brown or black with female having triangular wing pads
  - e. Approximately 1 inch long with a uniform mahogany brown color
9. Oriental roaches are
  - a. Approximately  $\frac{1}{2}$  inch long with 2 dark longitudinal stripes on the pronotum
  - b. Approximately 1 -1  $\frac{1}{2}$  inches long with reddish-brown with a yellow border on the pronotum
  - c. Approximately  $\frac{1}{2}$  long with 2 transverse bands across the base of the wings and abdomen
  - d.
  - e. Approximately  $\frac{3}{4}$  to 1" long dark brown or black with female having triangular wing pads
  - f. Approximately 1 inch long with a uniform mahogany brown color
10. Rice weevil:
  - a. Redding brown beetle
  - b. Possesses a snout
  - c. 4 light red or yellow spots on the elytra
  - d. All the above
11. Angoumios grain moth
  - a. Small yellowish moth with pointed hind wings
  - b. Bronze tips on wings
  - c. Larvae are red in color
12. Cigarette beetle
  - a. Light brown beetle about 3 mm long
  - b. Hump-backed appearance
  - c. Pits present in the elytra
  - d. No lines present running the length of the elytra
  - e. All the above
13. Confused flour beetle
  - a. reddish brown beetle about 3 mm long
  - b. antennae ends in a 4-segmented club
  - c. cannot fly
  - d. All the above
14. Trogoderma species
  - a. Adults are tiny and round
  - b. Known as carpet beetles
  - c. Larvae are yellow to medium brown with dense clump of dark colored setae
  - d. All the above

15. Granary weevil
  - a. Chestnut brown beetle
  - b. Has elongated pits on thorax
  - c. Possesses a snout
  - d. 4 generations per year
  - e. No colored markings on back
  - f. All the above
16. The red imported fire ant
  - a. Will only nest indoors
  - b. Will only nest outdoors
  - c. doesn't sting
  - d. aggressively defends its colony
17. ULV means
  - a. Ultra-low volume
  - b. Ultimate light volume
  - c. Ultimate low volume
  - d. Ultra-light volume
18. The worker ant caste
  - a. Consists of reproductive males
  - b. Consists of reproductive females
  - c. Consists of all male and female ants
  - d. Consists of females who are not yet able to reproduce
19. Cockroach eggs develop in a case known as
  - a. Ootheca
  - b. Oocyte
  - c. Ovary
  - d. Oovarirole
20. The brown recluse spider can be identified by
  - a. A shiny brown body with a red hourglass shape on the abdomen
  - b. A brown body with a violin shape on the cephalothorax
  - c. A brown body with a violin shape on the abdomen
  - d. A red hourglass shape on the cephalothorax
21. Flies and fleas have what type of metamorphosis?
  - a. Incomplete metamorphosis
  - b. Gradual metamorphosis
  - c. Complete metamorphosis
  - d. Ametamorphosis
22. What is an advantage that an anti-coagulate rodent bait over an acute rodent bait?
  - a. Risk of killing non-target organisms is low
  - b. Availability of an antidote
  - c. Ray shyness rarely develops when a quality bait is utilized
  - d. All the above
23. Small reddish-brown moth whose larvae (not spotted) may show webbing when feeding
  - a. Indian meal moth

- b. Mediterranean meal moth
  - c. Angoumois grain moth
  - d. Indian grain moth
24. Second generation anti-coagulants
- a. Cause death only after multiple feedings
  - b. Cause death after a single feeding
  - c. Are only available in liquid formulations
  - d. None of the above
25. First generation anti-coagulants
- a. Cause death only after multiple feedings
  - b. Cause death after a single feeding
  - c. Are only available in block formulations
  - d. None of the above
26. Which of the following are examples of 1<sup>st</sup> generation anti-coagulants? Select all that apply
- a. Warfarin
  - b. Brodifacoum
  - c. Bromadiolane
  - d. Fipronil
27. Which of the following are examples of 2<sup>nd</sup> generation anti-coagulants? Select all that apply
- a. Warfarin
  - b. Brodifacoum
  - c. Bromadiolane
  - d. Deltamethrin
28. Norway rat droppings are
- a. ¼ inch long with blunt ends
  - b. ¼ inch long with pointed ends
  - c. ¾ inch long with blunt ends
  - d. ¾ inch long with pointed ends
29. Matching
- a. Internal feeders
  - b. External feeders
  - c. Scavengers
  - d. Secondary feeders
- \_\_\_\_\_ Eat outer part or chew through the outer shell and eat the inner portion of the grain
- \_\_\_\_\_ feed on materials which are damp or have mold growth
- \_\_\_\_\_ feed entirely within the kernel of the grain
- \_\_\_\_\_ feed on grain only after the seed coat has been broken
30. Saw tooth grain beetles
- a. Has 6 projections on each side of the thorax

- b. Does not fly
  - c. Infests stored products
  - d. All the above
31. House mouse
- a. Have an average life span of 1 year
  - b. Average 8 litters of pups in her lifetime
  - c. Produce droppings that are  $\frac{1}{4}$  in long, elongated and have no ridges
  - d. All the above
32. Norway rat
- a. Has a blunt nose and short tail
  - b. Has small eyes and a thick heavy body
  - c. Produce droppings that are  $\frac{3}{4}$  inch long with blunt ends
  - d. All the above
33. Roof rat
- a. Has a long tail and a pointed nose
  - b. Has a slender body and large eyes
  - c. Produce droppings that are  $\frac{1}{2}$  inch long with elongated pointed ends
  - d. All the above
34. Which of the following are TRUE
- Mice recognize each other by sight.
  - A mouse's least developed sense is smell
  - A mouse's sense of smell is keener than a human's sense of smell
  - Rat litters average 6-8 pups
  - Roof rats and Norway rats have a 22-day gestation period
  - Rats are excellent jumpers
  - Rats are curious and will explore new objects in the environment
  - Rats are neophobic
  - Mice are curious and will explore new objects in the environment
  - Mice are neophobic
  - Talon is an example of a brand name of an anti-coagulant rodenticide
35. True or False    Smell is a mouse's least developed sense.
36. True or False    Human's sense of smell is keener than that of a mouse.
37. True or False    House crickets thrive indoors.
38. True or False    The Yellow Meal worm is not a worm.
39. All moths undergo metamorphosis that consists of
- a. Egg, nymph, adult
  - b. Egg, larvae adult
  - c. Egg, pupa, adult
  - d. Egg, larvae, pupa, adult
40. True or False    The Argentine ant nests outside of building but will forage for food inside a structure.
41. The flat grain beetle is a/an
- a. Internal feeder

- b. External feeder
  - c. Scavenger
  - d. Secondary feeder
42. Spider beetles are
- a. Insects
  - b. Arachnids
  - c. Spiders
  - d. None of the above
43. Drugstore beetles have antenna that end in
- a. Small beaded segments
  - b. 3 enlarged segments
  - c. 4 enlarged segments